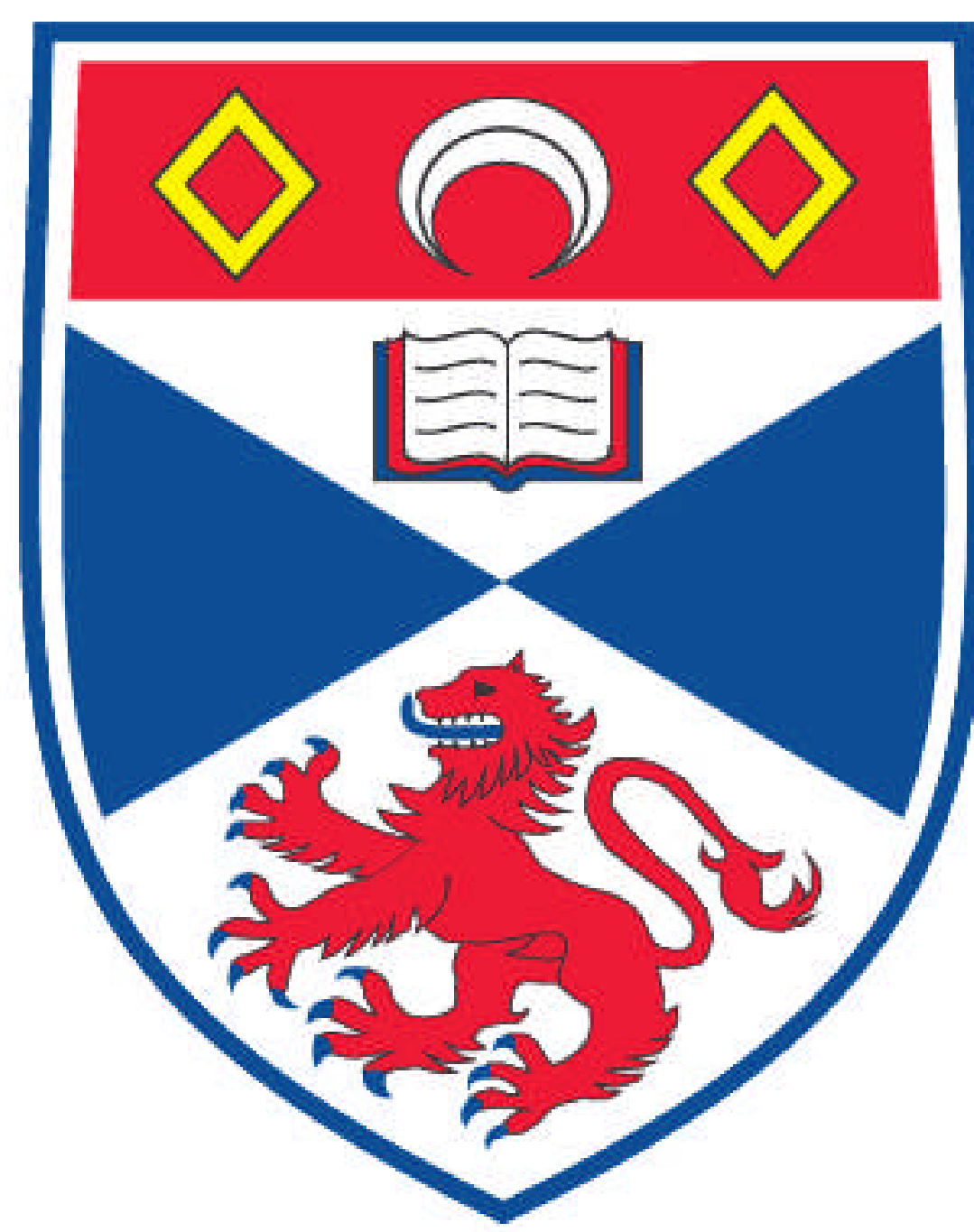


**ALEXANDER DALRYMPLE (1737-1808), HYDROGRAPHER TO
THE EAST INDIA COMPANY AND TO THE ADMIRALTY AS
PUBLISHER: A CATALOGUE OF BOOKS AND CHARTS
VOLUME I**

Andrew S. Cook

**A Thesis Submitted for the Degree of PhD
at the
University of St. Andrews**



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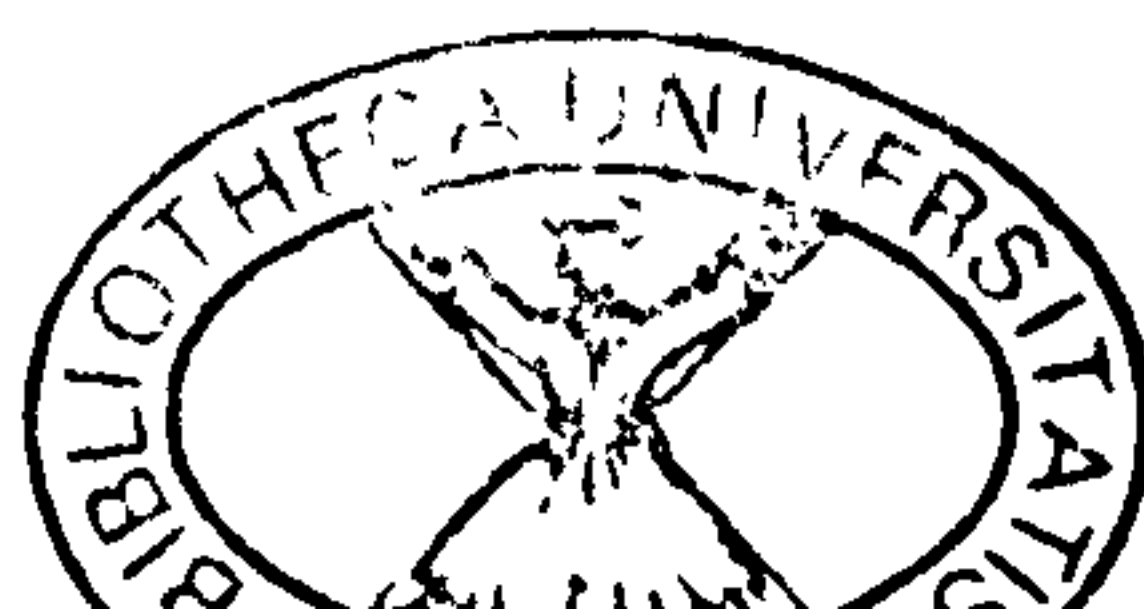
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ALEXANDER DALRYMPLE (1737-1808),
HYDROGRAPHER TO THE EAST INDIA COMPANY AND TO THE ADMIRALTY,
AS PUBLISHER:
A CATALOGUE OF BOOKS AND CHARTS

ANDREW S. COOK

Thesis submitted for the degree of Doctor of Philosophy
in the University of St. Andrews
September 1992



ABSTRACT

This is a study of the publications and publishing practices of Alexander Dalrymple (1737-1808). Dalrymple was cumulatively a private publisher of nautical charts and plans (from 1767), the 'examiner of ships' journals' and chart publisher for the East India Company (from 1779), and Hydrographer to the Admiralty (from 1795).

The core of the study is a catalogue of the known publications of Alexander Dalrymple, defining and establishing his oeuvre. The catalogue is in two parts, Catalogue A for the letterpress publications, numbering 257, and Catalogue B for the engraved charts, plans of ports, views of land, and other illustrations, numbering 1116. The entries in each part of the catalogue are arranged chronologically by date of publication, with full bibliographical and technical descriptions, and notes of attribution, dating and inter-relationships.

The introduction gives a short account of Dalrymple's life, focussing on his publishing activity, and introducing his geographical and political pamphlet publishing. Four phases of activity in his nautical publication are identified: the decision to publish charts and memoirs from his own voyages in the Eastern Archipelago (1769-1772); the private publication of charts and plans with grants or subscriptions from the East India Company (1772-1779); the annual series of charts, plans, views and memoirs issued from 1779 onwards for the East India Company; and the organisation and output of the Admiralty Hydrographic Office which he ran in parallel with his East India Company work after 1795. This is supplemented by a discussion of the continuing use made of Dalrymple's charts after his death in 1808.

An investigation of Dalrymple's engraving and publishing practices follows, with a brief survey of his technical leaflets and manuals on nautical surveying and chronometer use, and an account of *Oriental Repertory*, his chief non-nautical publication. The study emphasises the close personal control Dalrymple exercised over his publications, and the consequent problems in the Admiralty and East India Company in developing arrangements to continue publishing charts after his death.

I, Andrew Stanley Cook, hereby certify that this thesis, of which the text of the introduction is approximately 44,000 words in length, has been written by me, that it is the record of work carried out by me and that it has not been submitted in any previous application for a higher degree.

Date: 26.9.92

Signature of candidate:



I was admitted as a research student under Ordinance No. 12 in October 1985 and as a candidate for the degree of Doctor of Philosophy in October 1986; the higher study for which this is a record was carried out in the University of St. Andrews between 1985 and 1992.

Date: 26.9.92

Signature of candidate:



I hereby certify that the candidate has fulfilled the conditions of the Resolution and Regulations appropriate for the degree of Doctor of Philosophy in the University of St. Andrews and that the candidate is qualified to submit this thesis in application for that degree.

Date: Nov 17/92

Signature of supervisor:



In submitting this thesis to the University of St. Andrews I understand that I am giving permission for it to be made available for use in accordance with the regulations of the University Library for the time being in force, subject to any copyright vested in the work not being affected thereby. I also understand that the title and abstract will be published, and that a copy of the work may be made and supplied to any *bona fide* library or research worker.

Date: 26.9.92

Signature of candidate:

A stylized, handwritten signature in black ink, appearing to be a cursive or semi-cursive script, possibly reading 'M. J. ...'.



Alex. Dalrymple?

Geo. Dance del. 26 July 1794.

Published by Will^m. Daniell, B^{ro}. Cleveland Street Fitzroy Square, London, July 1. 1809.

W^m. Daniell Fecit

Alex[ande]r Dalrymple. Engraving by William Daniell, published in 1809,
of a crayon profile by George Dance, executed on 26 July 1794.
Dalrymple was 57 years of age.

'AN AUTHOR VOLUMINOUS AND VAST':
ALEXANDER DALRYMPLE (1737-1808),
HYDROGRAPHER TO THE EAST INDIA COMPANY AND TO THE ADMIRALTY,
AS PUBLISHER:
A CATALOGUE OF BOOKS AND CHARTS

ANDREW S. COOK

'I have two brothers there [in the Philippines] already, I suppose engaged in plundering the Spaniards. Your friend Willy is one of them, the other, a more romantic person than our modern cold times have produced: for bred a merchant upon dry land, he has become an able navigator, and if he lives will be an author voluminous and vast.' (Sir David Dalrymple to James Boswell, 13 February 1763 (Yale University, Boswell Papers, cited by R. H. Carnie, Lord Hailes: A Study, Ph.D. St. Andrews, 1954, p. 15)).

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For Karen, who helped.

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CATALOGUE OF DALRYMPLE'S LETTERPRESS PUBLICATIONS

Contents list in volume II

CATALOGUE OF DALRYMPLE'S ENGRAVED CHARTS, VIEWS, PLANS AND DIAGRAMS

Contents list in volume III

ILLUSTRATIONS

Alex[ande]r Dalrymple. Engraving by William Daniell, published in 1809, of a crayon profile by George Dance, executed on 26 July 1794. Dalrymple was 57 years of age.

Facing title

Alexander Dalrymple. Full-length seated portrait (36 x 28 inches), oil on canvas, by John Thomas Seton (c1735-c1806). Circumstantial evidence of Dalrymple's life points to this portrait having been taken in the late summer or autumn of 1765 at Newhailes, probably commissioned by Sir David Dalrymple for the family. Dalrymple is thought to be wearing the uniform of an East India Company captain, the sword propped against the chimneypiece. Dalrymple was 28 years of age in 1765. *Private collection.*

Preceding page 20

A Map of part of Borneo, and The Sooloo Archipelago: Laid down chiefly from Observations made in 1761, 2, 3, and 4. by @Dalrymple. Published 20 October 1769, fourth issue [1789]. Catalogue B13 691029b Borneo.

Following page 314

New Holland, Sumbawa, Lombock, Bally and Madura [views]. Published 1 March 1780. Catalogue B178 800301d New Holland views.

Following page 314

Plan of Demaoon ... From an accurate Survey by John McCluer 1788. Published 28 February 1790. Catalogue B625 900228 Demaoon.

Following page 314

Harbour and Road of Suez in the Red Sea, by George Trotter, Master of the Swallow, 1777. Published 10 November 1779. Catalogue B162 791110 Suez.

Following page 314

Sketch of the Bay SW of Suez by J. Ellis, From a MS in Admiral Blanket's Collection. Published 31 May 1806. Catalogue B1063 060531h Suez.

Following page 314

ABBREVIATIONS

Catalogue A1-A257, Catalogue B1-B1116: Citations in this form are citations of Dalrymple's publications, and refer to entries in the catalogues which follow this introductory volume. In 'Catalogue B' references, the six-figure code which follows the catalogue number is a publication date code, explained in Appendix 2 below, and in the prefatory notes to Catalogue B.

AN	Archives Nationales, Paris
ATL	Alexander Turnbull Library, Wellington, New Zealand
BIF	Bibliothèque de l'Institut de France, Paris
BL	British Library, London
BN	Bibliothèque Nationale, Paris
BRL	Birmingham Reference Library, Archives Department
EUL	Edinburgh University Library
HHL	Henry E. Huntington Library, San Marino, California
HLRO	House of Lords Record Office, London
HO	Hydrographic Office, Ministry of Defence, Taunton
IOR	India Office Records, London [now administered by the British Library as part of its Oriental and India Office Collections]
KBNL	Koninklijke Bibliotheek, 's-Gravenhage, Netherlands
KCL	King's College Library, London
LC	Library of Congress, Washington D.C.
MUN	Memorial University of Newfoundland, St. John's Newfoundland
NHL	Naval Historical Library, London [now part of Ministry of Defence Central Library]
NLA	National Library of Australia, Canberra
NLS	National Library of Scotland, Edinburgh
NYPL	New York Public Library
PRO	Public Record Office, London
RAS	Royal Astronomical Society, London
RS	Royal Society, London
SOAS	School of Oriental and African Studies, University of London
SRO	Scottish Record Office, Edinburgh

For ease of reference these abbreviations, and the conventional short titles of books and journal articles, are refreshed by a full citation at their first occurrence in each chapter. The Latin abbreviations 'op. cit.', 'loc. cit.' and 'ibid.' are not used.

ACKNOWLEDGEMENTS

To my supervisor Professor Bruce P. Lenman, I owe a deep debt of gratitude for his courage in accepting, as a candidate for the degree of Doctor of Philosophy, a member of General Council who, employed full-time as an archivist over 400 miles away, proposed himself as a part-time research student, and whose M.A. degree was then already fifteen years old and in Mediaeval History. Without Professor Lenman's wise counsels and unremitting involvement, the ship would not have ended its voyage in this port.

I am grateful to my colleagues in the India Office Library and Records, and in the British Library, for their support, forbearance and provocation throughout this research. I acknowledge with thanks the financial contribution the British Library has made, in its training and career development programmes, towards my academic fees and travelling expenses to attend supervisions. I am grateful too, for the technical and logistical support of the India Office Library and Records in giving access to computer facilities.

It is a particular pleasure to acknowledge the assistance I have received from colleagues and friends in the many archives, libraries, universities, museums, private collections, antiquarian booksellers and auction houses I have visited or corresponded with in Britain, Europe, America and Australasia in pursuit of Dalrymple's publications and writings. They are now too many to name individually here.

I acknowledge with thanks the confidence placed in this project by the Bibliographical Society of America in awarding a short-term fellowship to enable me to visit collections at Harvard, Yale, Brown and Princeton, and in New York and Washington D.C., in the preparatory stages of this investigation.

September 1992

INTRODUCTION

Alexander Dalrymple, now generally regarded as the originator of official British hydrography, was an often controversial influence in the lives of many contemporaries and in the development of many enterprises in the late eighteenth century. He has consequently been accorded a minor part in biographies and histories, often casually labelled with phrases such as 'a flamboyant Scottish explorer',¹ their authors naturally developing those facets of his character which reflected the subjects of their writing. For Beaglehole, Dalrymple was the man whom James Cook replaced and who became the adversary of Cook through his criticism of Hawkesworth.² For Tarling, Dalrymple was the busy but two-dimensional personality who set the legal basis for British involvement in northern Borneo.³ For Gough, Dalrymple was the 'irascible, eccentric East India Company hydrographer' who proposed detailed sea surveys of the coast of north-west North America to settle the question of the North-west Passage.⁴ For Carter, Dalrymple was a very minor influence on Sir Joseph Banks, much less than the evidence of publications and letters would suggest.⁵ For Gould, Dalrymple was the adversary of Earnshaw in 1806 in the Arnold-Earnshaw controversy over primacy in chronometer escapement design.⁶ Day's *The Admiralty Hydrographic Service* understandably concentrates on Dalrymple's work for the Admiralty;⁷ Ritchie ranges wider, but keeps within the field of exploration charting.⁸ Mackay and Keay have each identified a spectrum of Dalrymple's interests,⁹ but, as Harlow showed,¹⁰ it has proved difficult to produce a succinct and accurate coherent pen-portrait of Dalrymple.

Early biographical accounts¹¹ stemmed from Dalrymple's autobiographical statement in *The European Magazine* in 1802,¹² as did the entry in

Chambers' *Biographical Dictionary of Eminent Scotchmen*, from which many subsequent biographical dictionary entries were extended.¹³ John Barrow's sketch¹⁴ is one of few to add anything from personal knowledge of Dalrymple, though Dawson in *Memoirs of Hydrography* added anecdotal detail.¹⁵ By the time Willi¹⁶ and Bayldon¹⁷ were writing in the 1920s the historical fields which Dalrymple spanned were already growing apart and compartmentalising study of Dalrymple's spheres of activity.

In 1945 Hugh Carrington, the biographer of James Cook,¹⁸ was the first to attempt a biography of Dalrymple. His draft started easily, but he was quickly forced into a patchwork of episodes, the degree of detail dictated by the availability of the sources rather than the importance of the events. At his death in 1947 the biography was stalled at the problem of how to gain intellectual control of the corpus of Dalrymple's publications, both engraved and letterpress.¹⁹ Howard Fry, in his Cambridge dissertation in the 1960s,²⁰ followed Carrington quite closely for his early chapters and became tied in to Carrington's episodic approach. Fry's dissertation (and consequently his book²¹) provided a valuable series of short studies, but like Carrington he baulked at defining Dalrymple's printed output, treating 'The Hydrographer' as another episode in his life. William Spray, writing out of his unpublished London dissertation,²² has produced so far the most successful summary of Dalrymple's achievements.²³ But no biographer has effectively examined the core which ran through Dalrymple's life, his sense of responsibility to assemble, codify and publish geographical knowledge.²⁴ Dalrymple himself measured his own reputation at times of difficulty in terms of the quantity of his publications,²⁵ and historians have been content to use these figures as simple measures of the bulk of his achievement.²⁶

Apart from the lists Dalrymple published of his own charts, views, plans and memoirs,²⁷ and apart from library catalogues of individual collections of his publications,²⁸ the first attempt at a 'bibliography' of Dalrymple was made by Frank Marcham in 1919. Using British Museum and Public Record Office collections Marcham produced a typescript chronological list of charts, views, plans and memoirs together, which remained unpublished.²⁹ Carrington, as part of the work for his biography, began a bibliography, deliberately omitting charts, plans and views not by Dalrymple himself.³⁰ Herbert Edwards compiled notes on many of Dalrymple's letterpress works, from the resources of the antiquarian booksellers Francis Edwards Ltd.: these notes were assembled after his death for publication in 1970,³¹ but cannot be considered a comprehensive catalogue. More recently provisional short-title lists of Dalrymple's charts, views and plans (though not memoirs) have been compiled by Andrew David,³² based on the posthumous printings of many of Dalrymple's plates by the Hydrographic Office, and extended by a cursory examination of a few other collections or their catalogues.

Collections of Dalrymple's charts, views, plans and memoirs, as they survive today, vary widely in composition. There is no single comprehensive collection, embracing all Dalrymple's publications over a forty-year period, which can be used as a 'control' to establish Dalrymple's *oeuvre*. Many published items went through different editions, issues or states during a long period of currency. It has therefore been necessary for this study to identify as 'key' collections those which Dalrymple assembled from time to time for presentation to favoured recipients, or which, for other reasons of provenance, are particularly significant.³³ The introductory notes which Dalrymple supplied to many of his letterpress works provide important evidence of his publishing intentions, and of the reasons for particular publications: this evidence has previously gone largely unexploited.

Equally important is the evidence from Dalrymple's major professional and official correspondences. His correspondence with the French hydrographer D'Après de Manneville from 1767 to 1780, and with D'Après' successor Claret de Fleurieu from 1783 to 1788 is preserved in Paris in the Archives Nationales and in the Bibliothèque de l'Institut de France, and covers very fully the chart compilation techniques Dalrymple was developing before his appointment by the East India Company in 1779. The official correspondence which Dalrymple, as a Company servant, carried on with the East India Company from 1765 to 1808 is preserved in London in the India Office Records,³⁴ and, though primarily concerned with contractual matters and accounting procedures, is valuable evidence of the progress of work in Dalrymple's Company period after 1779. Dalrymple's administration of the Hydrographical Office after 1795 was carried on with the Secretaries to the Board of Admiralty by correspondence now preserved in London in the Public Record Office: this is important for evidence of chart selection, engraving and publishing practice. Of secondary significance are Dalrymple's letters to Francis Beaufort from 1805 to 1808 (now in the Huntington Library in San Marino, California), and to Henry Dundas, Viscount Melville, from 1784 to 1808 (now chiefly in Edinburgh in the National Library of Scotland and the Scottish Record Office, and in Canberra in the National Library of Australia).

The establishment of a definitive catalogue of Dalrymple's printed output, with an assessment of the methods by which he achieved it, is a necessary codification of disparate source material which could form the basis for a future comprehensive and balanced biography of a most industrious and wide-ranging hydrographer.

NOTES TO INTRODUCTION

¹ 'The Royal Society initially chose Alexander Dalrymple, a flamboyant Scottish explorer, to lead the Pacific expedition. But the Admiralty refused to entrust a naval vessel to a mere civilian, and instead appointed a serving sailor well known for his skill in surveying and astronomy - James Cook.' (Continuity panel in British Museum/British Library exhibition 'Captain Cook in the South Seas', Museum of Mankind, London, 15 February-18 November 1979).

² J. C. Beaglehole (ed.), *The Journals of Captain James Cook*, 4 vols. in 5 (London, 1967-1974), particularly vol. i, pp. clxi-clxiv. See also J. C. Beaglehole, *The Life of Captain James Cook* (London, 1974), pp. 120-122 and 125-126. This episode of conflict has remained a fertile ground for exploration historians, and has generated many examples of the 'phrase-dismissive' to describe Dalrymple, including (as late as 1988) 'the self-appointed rival to Captain Cook' (Helen M. Wallis, 'Java la Grande: The Enigma of the Dieppe Maps', in Glyndwr Williams and Alan Frost (ed.), *Terra Australis to Australia* (Melbourne, 1988), pp. 39-83, particularly p. 72).

³ Nicholas Tarling, *Sulu and Sabah: A study of British policy towards the Philippines and North Borneo from the late eighteenth century* (Kuala Lumpur, 1978), chapter 1.

⁴ Barry M. Gough, *Distant Dominion: Britain and the Northwest Coast of America, 1579-1809* (Vancouver, 1980), chapter 7. The particular descriptive phrase occurs on p. 24.

⁵ Harold B. Carter, *Sir Joseph Banks 1743-1820* (London, 1988). Dalrymple is not alone, among Banks' contemporaries and associates, in being given by Carter a less significant part than other sources would suggest.

⁶ Rupert T. Gould, *The Marine Chronometer: Its History and Development* (London, 1922), particularly p. 125. Historians of the chronometer have treated Dalrymple with uncertainty: Vaudrey Mercer, *John Arnold & Son, Chronometer Makers 1762-1843* (London, 1972) is replete with references to Dalrymple's contacts with the Arnolds over almost thirty years, but steers clear of defining Dalrymple's *locus standi* and of investigating their professional relationship.

⁷ Sir Archibald Day, *The Admiralty Hydrographic Service 1795-1919* (London, 1967).

⁸ G. S. Ritchie, *The Admiralty Chart: British Naval Hydrography in the Nineteenth Century* (London, 1967). Despite his title, Ritchie reached back into the eighteenth century to discuss, among other subjects, Dalrymple's early treatises on nautical surveying.

⁹ David Mackay, *In the Wake of Cook: Exploration, Science and Empire 1780-1801* (London, 1985); John Keay, *The Honourable Company: A History of the English East India Company* (London, 1991).

¹⁰ Vincent T. Harlow, *The Founding of the Second British Empire 1763-1793*, 2 vols. (London, 1952-1964), vol. i, p. 36nn.

¹¹ 'Account of the late Mr. Dalrymple', *The Naval Chronicle* 20 (1808), pp. 210-215; 'Biographical Memoir of Alexander Dalrymple, Esq. late Hydrographer to the Admiralty', *The Naval Chronicle* 35 (1816), pp. 178-204; 'The Works of the late Alex. Dalrymple, Esq. Hydrographer

to the East India Company, and the Admiralty', *United Service Journal* 1 (1829), pp. 345-348 and 469-473.

¹² 'Memoirs of Alexander Dalrymple, Esq.', *The European Magazine, and London Review* 42 (1802), pp. 323-328, *321-*327 and 421-424. This in turn relied heavily on *Memorial of Alexander Dalrymple 1791* (Catalogue A177) and Dalrymple's *Catalogue of Printed Books and Tracts 1792*. (Catalogue A185).

¹³ R. Chambers, *A Biographical Dictionary of Eminent Scotchmen* (Glasgow, 1835), s.n. Dalrymple. The *Dictionary of National Biography* entry forms part of this descent, as do the entries in dictionaries from *Nouvelle Biographie Générale* (Paris, 1855) to the modern *Australian Dictionary of Biography*. A broadsheet obituary notice was issued, similar in phraseology to the notice of his death in *The Gentleman's Magazine* 78 (1808), p. 566. A similar line of descent of biographical account passes from *The European Magazine* through John Nichols, *Literary Anecdotes of the Eighteenth Century*, 9 vols. (London, 1812-1816), vol. viii, pp. 32n-39n, and through *Biographie Universelle, Ancienne et Moderne* (Paris, 1813). Given the flawed or anecdotal character of a number of the early accounts, one could contemplate developing a *stemma* for nineteenth- and twentieth-century dictionaries of biography, using as evidence the introduction, accumulation and perpetuation of egregious error in entries for Alexander Dalrymple. Such dictionaries as *Geschiedkundig Woordenboek, of Beknopte Levensbeschrijvingen* ('s Hertogenbosch, 1831), *La Grande Encyclopédie* (Paris, n.d.), and *Enciclopedia Universal Illustrada Europeo-Americana* (Bilbao, n.d.) show the distortions which can result from repeated translation and re-editing.

¹⁴ Sir John Barrow, *Sketches of the Royal Society and Royal Society Club* (London, 1849), pp. 134-139.

¹⁵ L. S. Dawson, *Memoirs of Hydrography*, 2 vols. (Eastbourne, 1885), vol. 1, pp. 25-29.

¹⁶ Johannes Willi of Gais, *The Early Relations of England with Borneo to 1805* (Langensalza, 1922), chapter 2.

¹⁷ Francis J. Bayldon, 'Alexander Dalrymple: The Man who wished to command the "Endeavour"', *Royal Australian Historical Society Journal & Proceedings* 13 (1927), pp. 41-59.

¹⁸ Hugh Carrington, *Life of Captain Cook* (London, 1939).

¹⁹ Carrington was working on his biography of Dalrymple in London in 1946, in consultation with R. A. Skelton, then on the staff of the British Museum Map Room and Honorary Secretary of the Hakluyt Society. Carrington's drafts and notes of 'Alexander Dalrymple, F.S.A., F.R.S. 1736-1808: An account of the Life and Work of the First Naval Hydrographer' passed informally into Skelton's hands, and thence were presented by the British Museum to the Alexander Turnbull Library [ATL], Wellington, New Zealand in 1964 (ATL: MS. Papers 79). Skelton had a microfilm made of the draft chapters (London, British Library: Maps Mic.a.14), though not of Carrington's working notes, which demonstrate the bibliographical problems Carrington was facing before his death (ATL: MS. Papers 79/11-12). See also note 30 below.

²⁰ H. T. Fry, *Alexander Dalrymple: Cosmographer and Servant of the East India Company*, Ph.D. Cambridge, 1966. (The typescript copy

presented to Prof. E. E. Rich is now in my possession.)

²¹ Howard T. Fry, *Alexander Dalrymple (1737-1808) and the Expansion of British Trade* (London, 1970). This prints the Ph.D. dissertation unrevised except for the addition of a further chapter 'Alexander Dalrymple and Captain Cook'. Fry further developed this additional theme as 'Alexander Dalrymple and Captain Cook: The Creative Interplay of Two Careers', in Robin Fisher and Hugh Johnston (ed.), *Captain James Cook and His Times* (Vancouver, 1979), pp. 41-57.

²² William Arthur Spray, *Surveying and Charting the Indian Ocean: The British Contribution 1750-1838*, Ph.D. London, 1966.

²³ W. A. Spray, 'Alexander Dalrymple, Hydrographer', *The American Neptune* 30 (1970), pp. 200-216. After Bayldon's critical account (see note 17 above), other had sketched Dalrymple's character in connection with particular aspects of his life: W. A. Mackaness, *Alexander Dalrymple's 'A Serious Admonition to the Public on the Intended Thief Colony at Botany Bay'* (Sydney, 1943), pp. 4-14 ('Alexander Dalrymple'); R. Glover, 'Hudson Bay to the Orient' *The Beaver* 250 (December 1950), pp. 47-51; Ken Tregonning, 'Alexander Dalrymple - The Man Whom Cook Replaced', *Australian Quarterly* 23 (1951), no. 3, pp. 54-63; Colin Jack-Hinton, 'Alexander Dalrymple and the Rediscovery of the Islands of Solomon', *The Mariner's Mirror* 50 (1964), pp. 93-114; E. Ehrlich, introduction to facsimile edition of *Memoir of a Map of the Lands around the North-Pole 1789* (Ottawa, 1973).

²⁴ Despite its title, the dissertation by Lanegran (David Andrew Lanegran, *Alexander Dalrymple: Hydrographer*, Ph.D. Minnesota, 1970) was spectacularly unsuccessful in this, allocates one chapter alone to disconnected observations on 'Dalrymple's Cartographic Method', consisting of disconnected observations on extracts from the printed introductions to Dalrymple's explanations to his chart collections. Sir Geoffrey Callender, writing from the National Maritime Museum in connection with the proposed disposal of items from the Royal Collections, was more percipient: 'I have studied the charts of Dalrymple, and with less thoroughness those of Bellin; but I am still very much puzzled, especially in regard to the former, what constitutes completeness in his cartographical labours' (Callender to Edward Lynam, British Museum Map Room, 14 December 1939 (British Library: Map Library Archives C2 (Windsor Castle: E. Lynam, correspondence and lists of maps, 1939-40))).

²⁵ 'Mr. Dalrymple, in prosecution of the trust committed to his charge, has already published 212 Copper Plates, relative to the Navigation of India, besides many Nautical Tracts explanatory of them, ...' (*Case of Alexander Dalrymple, Esq. 1784*, p. 3); 'In 1779 I was appointed by the East-India Company to examine their Ship-Journals, and to publish Charts, Plans, and Nautical Instructions: in which Service, including those before my return from India, I have published 58 Charts, 740 Plans, &c., 57 Views of Land, in the whole 855 Plates, besides many unfinished, and 50 Nautical Memoirs, &c.' (*Case of Alexander Dalrymple 1808*, pp. 1-2).

²⁶ C. R. Markham, *Memoir on the Indian Surveys* (London, 1871), pp. 403-404, and Fry, *Alexander Dalrymple*, p. 295, both use Dalrymple's 1808 figure. Lanegran, *Alexander Dalrymple*, p. 119, counted 703 'maps' published by Dalrymple in annual totals from 1768 to 1806, with the rider 'I am certain that I have not seen every map he published'.

²⁷ *List of Plans of Ports, &c.* 1783 (Catalogue A79); *List of Classes into which are distributed the Plans of Ports, &c.* 1786 (Catalogue A115) and annual addenda; *List of Charts, Plans of Ports, &c.* 1789 (Catalogue A162); *Nautical Memoirs and Journals* 1789 (Catalogue A163). See Catalogue A169, A181, A186, A194 and A205 for annual addenda to the 1789 lists.

²⁸ For example, *A Catalogue of Manuscript and Printed Reports, Field Books, Memoirs, Maps, etc., of the Indian Surveys, deposited in the Map Room of the India Office* (London, 1878), pp. 549-578, and P. L. Phillips, *A List of Geographical Atlases in the Library of Congress*, 8 vols. (Washington, D.C., 1909-1974), nos. 543-544. Lanegran, Alexander Dalrymple, p. 119, justifiably complained that 'because of their vague [i.e. brief] entries both catalogues are frustrating to use'. Isolated volumes of Dalrymple's charts, plans and views from sets in the British Museum were subjected to analytical cataloguing, and the resulting entries spread on a geographical-dictionary basis through *The British Museum Catalogue of Printed Maps, Charts and Plans*, 15 vols. (London, 1967).

²⁹ Frank Marcham, 'A Bibliography of Alexander Dalrymple mostly annotated by himself ...', unpublished typescript, 1919 [corrected c.1936-1946]. This typescript passed into the hands of R. A. Skelton, possibly through the medium of Hugh Carrington (see note 19 above), and probably before 1947. It remained with Skelton until his death in 1970, after which it was included among Skelton's professional papers purchased in 1971 by the Memorial University of Newfoundland, where it is presently located (St. John's, Memorial University of Newfoundland Library, Centre for Newfoundland Studies Archives [MUN]: Collection 59 [Skelton Papers], item II/D/1). Marcham had begun to connect examples of Dalrymple's plans in different collections in the British Museum, and to relate them to entries in a copy of *List of Charts, Plans of Ports, &c.* in the Public Record Office. His work was brought to my attention during the preparation of the catalogue of the Skelton collection (Alberta Auringer Wood, *Professional Papers, Correspondence, etc., of Raleigh Ashlin (Peter) Skelton 1906-1970* (St. John's, Newfoundland, 1989)).

³⁰ Carrington's draft notes passed, with the draft chapters of his biography of Dalrymple (see note 19 above) into R. A. Skelton's hands in or before 1947. Skelton continued to work in a desultory fashion to revise Carrington's lists, adding notes on disused British Museum cataloguing slips and on discarded galley proofs of Hakluyt Society publications. Carrington's bibliographical notes were not included in the presentation of his papers to the Alexander Turnbull Library in 1964 (see note 19 above), but went instead to Newfoundland with Skelton's papers in 1971 (MUN: Collection 59 [Skelton Papers], item II/D/2). A further small group of Carrington's Dalrymple papers passed from Skelton into the hands of Helen M. Wallis, Skelton's successor in the British Museum Map Room, who gave them to me in 1988.

³¹ H. S. Edwards, 'Alexander Dalrymple, F.R.S. (1737-1808), First Hydrographer to The Admiralty', *The Map Collector* 4 (1978), pp. 19-29.

³² Andrew C. F. David, 'A Catalogue of Charts and Coastal Views published by Alexander Dalrymple 1767-1808', privately circulated typescript, 1990; A. C. F. David, 'A Catalogue of Charts published by Alexander Dalrymple as Hydrographer to the Admiralty 1795-1808',

privately circulated typescript, 1977. David's work has developed in parallel with my own, though in proceeding from the standpoint of the Admiralty use of Dalrymple's charts he has been less concerned with the definition and analysis of Dalrymple as a publisher outside his Hydrographical Office responsibility. Dalrymple's Hydrographical Office output accounted for only about 15% of his lifetime publication. To investigate this aspect of Dalrymple's work, both David and I have benefitted from the preliminary work done in L. N. Pascoe, 'List of Admiralty Charts published each year from 1795 to 1826 [and] Cumulative List at year 1826', rough manuscript notes, 1978 (Taunton, Hydrographic Office Archives).

³³ The presentation collections include those to King George III (now in the British Library), to Sir Joseph Banks (now in the British Library, but with some depredations), to the British Museum (now in the British Library), to Sir David Dalrymple (now in the National Library of Scotland, from the Newhailes Library), to William Marsden (now dispersed among the libraries of King's College London, the School of Oriental and African Studies (University of London), and the Royal Geographical Society), to the Royal Society, to the Admiralty (the letterpress volumes only surviving, in the Naval Historical Library (previously the Admiralty Library, and now housed in the Ministry of Defence Central Library, London)), to the French hydrographers D'Après de Manneville and to Claret de Fleurieu (both now divided between the Archives Nationales and the Bibliothèque National, Paris, from the Service Hydrographique de la Marine), and to Sir Francis Beaufort (now in the Library of Congress, Washington D.C.). Important collections assembled by assiduous purchase include those of the Hanoverian library of King George III (now in the Niedersächsische Staats- und Universitätsbibliothek, Göttingen), of the library of the Faculty of Advocates (now in the National Library of Scotland), and of the posthumous collection of the French geographer D'Anville (now in the Bibliothèque National, Paris). The India Office Records collection is important for holding sets of the impressions which Dalrymple supplied under contract of his charts, views and plans. Remnants of the sets of impressions he reprinted for the Admiralty can be identified in the Naval Historical Library. Impressions taken from Dalrymple's Hydrographical Office plates during his lifetime are chiefly found in the Naval Historical Library, in the Hydrographical Office archives at Taunton, and in the Royal Geographical Society Map Room. The unique collection formed by Thomas Grenville, probably when First Lord of the Admiralty in 1806, chiefly of Dalrymple's unpublished or ephemeral letterpress pieces, is now in the British Library as part of the Grenville Library. The best sets of Dalrymple's later compilations of his own publications occur by chance in New York Public Library Maps Division and in the Koninklijke Bibliotheek in 's-Gravenhage, Netherlands. Posthumous record impressions from plates unfinished or unpublished during Dalrymple's lifetime occur mainly in the India Office Records and Hydrographical Office archives, and are included in this study for completeness. The routine re-publication of Dalrymple's charts, views and plans after his death, in the regular Admiralty Chart series, has resulted in sets of these posthumous impressions occurring in institutions which have developed historical collections of Admiralty Charts, most notably the Hydrographic Office at Taunton (the 'Old Copy Bundles' series), the British Library Map Library (series 'SEC.1' to 'SEC.15'), the National Maritime Museum at Greenwich, and (by official

presentation in 1830) the Bibliothèque Nationale in Paris. This posthumous revision and re-issue of plates already published in Dalrymple's lifetime does not form part of the present study.

³⁴ In the many cases where Dalrymple's letters were dealt with at the Court table, or by Company committees (such as those of House, Accounts or Shipping) whose records do not survive, the term 'official correspondence' is used, for the purpose of this study, to embrace also the consequential Court Minutes, accounting records and marine records surviving as evidence of those transactions in the India Office Records.

CHAPTER 1

'A CHILD OF THE COMPANY':*

A BIOGRAPHICAL SKETCH OF ALEXANDER DALRYMPLE

Alexander Dalrymple was born on 24 July 1737, the eleventh child and seventh son of Sir James Dalrymple, second Baronet, of Hailes, in the county of Haddington, and Christian Hamilton, youngest daughter of Thomas, sixth Earl of Haddington. He was born into a family tradition of professional competence and public position: Sir James had followed his father, Sir David Dalrymple, as Member of Parliament for Haddington Burghs and as an Auditor to the Exchequer of Scotland.¹ Alexander's childhood was spent at the family home at Newhailes, near Musselburgh, and at school at Haddington.² In March 1747 Sir James settled 9,000 merks Scots (£500 sterling) on each of his five youngest surviving children, payable at marriage or majority.³ Sir James died in February 1751 having appointed Tutors and Curators for the affairs of his younger children: these included his widow and the children's eldest brother now Sir David Dalrymple.⁴

The surviving *sederunt* of the Tutors and Curators for 16 March 1752 reports the promise by 'Mr. Baker, Deputy Governor of the East India Company' of a writership in the Company's service for Alexander,⁵ through the acquaintance of Lieutenant-General James St. Clair (second husband of Sir James Dalrymple's sister Janet) with Baker.⁶ He straightaway left school at Haddington, and was taken to London by his brother David, to spend some months at 'Mr. Kinross's academy' at Forty Hill, Enfield, learning 'writing and merchants' accounts' for East India Company service.⁷ He was appointed a writer on 1 November 1752, having falsely declared his age as 16, and was posted to Madras.⁸ General St. Clair, through a mutual friend, Thomas Wilson, influenced

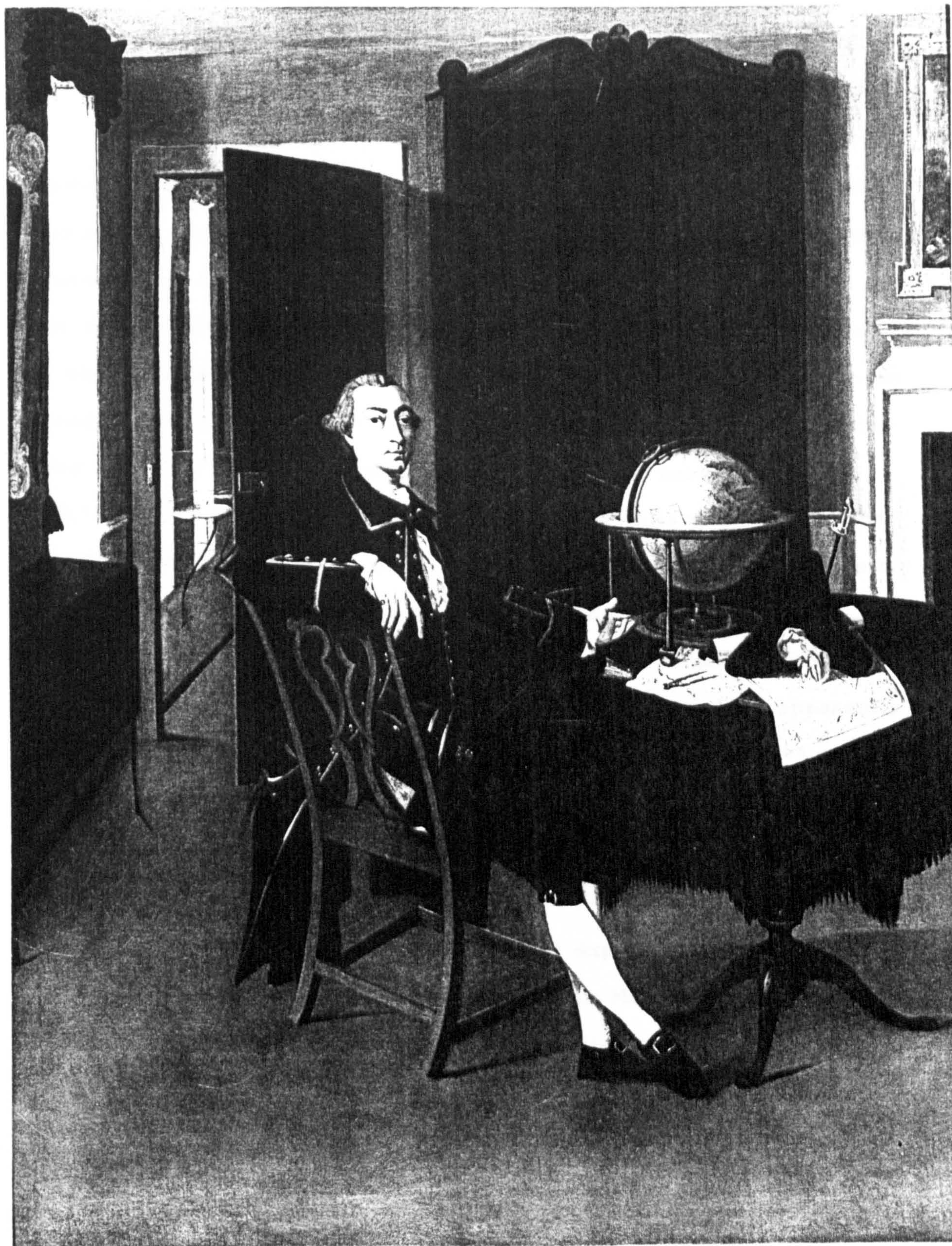
Robert Lewin, chief mate of the *Suffolk*, to persuade Captain William Wilson to allow Dalrymple a passage to Madras.⁹

Arriving in Madras on 11 May 1753 Dalrymple worked first under the Storekeeper, transferring to the Secretary's office probably before October 1753.¹⁰ His standing improved after the arrival of George Pigot from Vizagapatam in October 1754 to take up the governorship:¹¹ he had been recommended to Pigot through a connection between Pigot's brother, Admiral Hugh, and General St. Clair.¹² Pigot was eighteen years Dalrymple's senior, a bachelor though by this time with a household which included two daughters, Sophia and Leonora.¹³ From this point Dalrymple's career at Madras begin to develop.¹⁴ He was appointed in 1755 to learn assaying under the assay-master Edwards,¹⁵ and was later assistant to the Receiver-General.¹⁶ In July 1756 he was appointed Clerk to the Committee of Accounts,¹⁷ and in May 1757, after five years in Madras, Sub-Secretary under Josias Dupré,¹⁸ a position he occupied for the next two years. Dalrymple was at the centre of events in Madras during the turbulent 1750s: the loss of Calcutta in 1756 and its recapture by Clive's force in 1757, leaving Madras ill-equipped to deal with the French threat and the siege which came late in 1758. He could report authoritatively though informally to his brother David in October 1757 on Clive's success in Bengal, and on its consequences for Madras.¹⁹

Pigot's influence lifted Dalrymple from his previous routine existence.²⁰ As Clerk to the Committee of Accounts he was noticed by Robert Orme, then Accountant and a Member of Council, and was allowed the use of Orme's private library.²¹ As Sub-Secretary to Dupré, with the reasonable expectation of succeeding to the Secretaryship,²² Dalrymple combed the old Company records in Madras for references to expeditions and trade in areas to the east, Negrais, Ava, Cochin-China, and Borneo

and the Sulu Islands.²³ With this background he could advise Wilson, returning to Madras in the *Pitt* in September 1758 en route to China,²⁴ of the viability of the latter's scheme to make China 'out of season' against the prevailing monsoons by an extreme eastern passage, east of the Moluccas.²⁵ Pigot consulted Dalrymple before issuing new orders to Wilson,²⁶ and Dalrymple later published directions, charts and plates of views of Wilson's passage.²⁷

In February 1759 Dalrymple proposed himself to explore the eastern passages and their trading opportunities.²⁸ Pigot tried to persuade him into the lucrative Secretaryship, but accepted Dalrymple's refusal, providing the *Cuddalore*, Captain George Baker, for Dalrymple 'to attempt to discover a new route to China through the Molucca Islands and New Guinea'.²⁹ Dalrymple made three voyages between 1759 and 1764 to the Philippines, Borneo and Sulu. In the first, based at Canton, he took the *Cuddalore* to the Batan and Babuyan islands north of Luzon in 1759, and reconnoitred the coast of Cochin-China in 1760, as well as the coasts of Borneo and the Philippines in 1761.³⁰ Escorting a convoy of five Indiamen through the Philippines in January 1761, he lost one, the *Griffin*, which sank after striking rocks off Basilan.³¹ For the second voyage, in the *London* in 1762 and 1763, he had James Rennell³² as companion and draughtsman for a voyage to Sulu and Balambangan, where he had obtained for the Company the grant of a settlement.³³ In Madras in 1763 he proposed to return to London to explain to the Court of Directors his scheme for a trading settlement at Balambangan, and (at Pigot's request) went through the formality of resignation, confident of reinstatement in London.³⁴ On this third voyage, in the *Neptune* to Canton for passage to England, he delayed at Manila until April 1764, becoming Provisional Deputy-Governor for three days in the confusion of rendition after the Treaty of Paris.³⁵ He returned to Sulu again before taking his departure from Canton in



Alexander Dalrymple. Full-length seated portrait (36 x 28 inches), oil on canvas, by John Thomas Seton (c1735-c1806). Circumstantial evidence of Dalrymple's life points to this portrait having been taken in the late summer or autumn of 1765 at Newhailes, probably commissioned by Sir David Dalrymple for the family. Dalrymple is thought to be wearing the uniform of an East India Company captain, the sword propped against the chimneypiece. Dalrymple was 28 years of age in 1765. *Private collection.*

the *Latham* in January 1765.³⁶ Dalrymple's report, drafted in consultation with Orme, was shelved by the Court of Directors in November 1765.³⁷

Dalrymple returned to Newhailes briefly in the autumn of 1765,³⁸ before joining the Pigot household in Soho Square, London, an operating base which he was to maintain until 1780.³⁹ Loyalty to Pigot apparently lost him an introduction to the Earl of Egmont, First Lord of the Admiralty, to whom Kempenfelt had recommended him as a source of information on South Pacific exploration.⁴⁰ In 1766 and 1767 Dalrymple was pushing hard his claim to be involved in such exploration, both directly to Pitt,⁴¹ and to Shelburne through Adam Smith.⁴² His name was on the Royal Society list of 12 November 1767 as a candidate for the Transit of Venus expedition to the South Pacific.⁴³ He accelerated the preparation of his *Account of the Discoveries in the South Pacifick Ocean prior to 1764* to impress the Royal Society committee, apparently printing a few copies for private circulation in autumn 1767.⁴⁴ The *Account* was a geographical description of places discovered between America and Papua south of the Equator, with an analysis of the decisions and routes taken by Pacific expeditions before Byron, and a discussion of what future expeditions might expect. Though replaced by James Cook in the Royal Society expedition in May 1768,⁴⁵ Dalrymple achieved notoriety for his advocacy of a large southern continent by the formal publication of the *Account* in March 1769 and by the publication of his sources in *Historical Collection of the several Voyages and Discoveries in the South Pacific Ocean* in 1769/70 and 1771.⁴⁶

The Balambangan project came to life again in 1768: Dalrymple's scheme had been circulating in the Court of Directors without his knowledge,⁴⁷ and, when he codified it on request in July,⁴⁸ he memorialised the

Directors asking to be restored to Madras if not sent to Balambangan.⁴⁹ The Company dropped the scheme,⁵⁰ and Dalrymple threatened to publish his *Plan with An Account of what has passed between the India Directors and Alexander Dalrymple*.⁵¹ The Court took legal advice, but such a publication proved beyond the Company's control, as Dalrymple was deemed never formally reinstated as a Company servant after his 1763 resignation.⁵² Eventually, after issuing a few copies of *Memorial, Account and Plan*,⁵³ Dalrymple was awarded a gratuity of £5000 in place of ten years' lost salary in June 1769.⁵⁴

By 1769 Dalrymple had established his position in London: a Madras civil servant, captain of two 'country' ships with experience in the China Sea and Philippines, a marine surveyor and navigator, an expert in the history of South Pacific exploration, a strong advocate of Company involvement in south-east Asia, a student of chartmaking and an author of books and pamphlets, he had good family connections, a firm base in Pigot's London home, an increasing network of scientific acquaintance, and now solid private capital. He had no particular clique in the East India Company, but maintained a minimum voting stockholding as a Proprietor.⁵⁵ He was already building a considerable private library,⁵⁶ and was in correspondence with De Brosses⁵⁷ and, more significantly, with D'Après de Manneville,⁵⁸ as he increasingly spent his time compiling charts and nautical memoirs of his earlier voyages. Dalrymple was proposed by Benjamin Franklin for the Royal Society on 8 November 1770,⁵⁹ attending that day's meeting as Nevil Maskelyne's guest. He was elected on 14 February and admitted on 14 March 1771.⁶⁰ His friendship with Franklin dated from at least 1769,⁶¹ and the two collaborated in 1771, after Cook's return in the *Endeavour* on 12 July, in the paper scheme for a settlement in New Zealand.⁶²

Between 1769 and 1775 the main stream of Dalrymple's activity was in chart and plan publication. He continued to press for a Balambangan expedition,⁶³ and was appointed to the chiefship of a new settlement in September 1770,⁶⁴ only to be dismissed in March 1771 before the ship sailed in a disagreement over complement and salary.⁶⁵ But this was an interlude, similar to his project for a 'Republican-colony' on land yet to be discovered in the south Atlantic Ocean,⁶⁶ and to his disagreement with Hawkesworth over the publication of Cook's voyage.⁶⁷ He entered the pamphlet controversy of 1769 over the appointment of supervisors of the Company's affairs in Bengal,⁶⁸ returning to the subject in 1772 with Pigot's suggestions for Indian administration,⁶⁹ but these were not long-term interests. Only when Pigot was re-appointed to Madras as Governor in January 1775⁷⁰ did Dalrymple apply formally to return to Madras to the Council position which his old seniority would entitle him.⁷¹ Though much involved with Company affairs since 1765, Dalrymple was still nominally out of Company service in 1775. His formal resignation of 1763 had been compounded by his 1771 dismissal from the Balambangan expedition, but in March and April he successfully argued his case for reinstatement at a General Court of Proprietors,⁷² and was sworn as a Madras Council member on 11 April,⁷³ sailing in the *Grenville* on 24 April.⁷⁴

In Madras in 1776 Dalrymple was soon embroiled in the controversy which Pigot had been appointed to clear up. A group of council members and others, led by George Stratton had loaned the Nawab of Arcot large sums of money against the revenues of lands then in his possession, but disputed with the Rajah of Tanjore.⁷⁵ To restore Tanjore, as Pigot was instructed, would have rendered Arcot incapable of paying his debts, and in turn would have bankrupted his creditors on the Madras Council. These creditors consistently voted against Pigot's attempts to vary the day-to-day composition of the Council to

give his own group (Dalrymple, Russell, Lathom and Stone) a working majority.⁷⁶ Pigot was driven to the limits of constitutionality in an attempt to assert his authority, and was summarily arrested by the opposing faction, who set up a rump Council under Stratton.⁷⁷

Dalrymple was permitted to return to London to represent Pigot's case to the Court, travelling in the *Swallow* to Suez,⁷⁸ and from Alexandria to Marseilles, Calais and London in late 1776 and early 1777.⁷⁹ The resulting controversy occupied the Company until June 1777, Dalrymple contributing pamphlets in defence of Pigot,⁸⁰ and in defence of his own position when a decision was taken to recall Pigot's group as well as Stratton's group, for an investigation of their conduct.⁸¹ The news, which reached London in February 1778, of Pigot's death under house-arrest in Madras in May 1777, did not alleviate Dalrymple's position.⁸² He had to remain in Britain, as it were 'recalled', until the other Madras Council members could similarly return to London.⁸³ It was during this waiting period that Dalrymple took up the East India Company position, examining ships' journals and making charts, which he was to hold for the rest of his life.

Despite his insistence that his employment in London was not to invalidate his pretensions at Madras, should he wish to return, Dalrymple never returned to India. As each year's nautical publications were added to the previous accumulation, he found that his position was effectively permanent, and he remained based in London. He dusted off his theoretical Madras pretensions on two occasions, each time on a point of principle, in 1784 in response to Pitt's India Bill, and in 1791 when the Madras Governorship was about to pass below him. Pitt's India Bill proposed that Company servants who had been away from India and residing in Europe for five years should not be eligible for re-appointment to India.⁸⁴ Dalrymple found the Company unwilling to propose a particular exception for him,⁸⁵ and petitioned Parliament and

the King to establish his claim publicly.⁸⁶ When Claud Russell, the last person senior to Dalrymple at Madras, returned to England in the 1780s,⁸⁷ and the Company considered resuming the appointment of civilian Governors in 1790,⁸⁸ Dalrymple advanced his claim to be considered, as the most senior Madras servant.⁸⁹ His case quickly dissolved into a claim for a pension, using the precedent of those granted to senior military officers similarly passed over.⁹⁰ The award of an annuity in April 1791 marked the end of Dalrymple's Madras pretensions.⁹¹

Dalrymple lived increasingly comfortably in London after 1779, receiving £500 a year for his hydrographic work for the Company,⁹² the additional £500 a year annuity for his past Madras service from 1791,⁹³ and a further £500 a year from the Admiralty as Hydrographer's salary after 1795.⁹⁴ A lifelong bachelor he had few financial commitments, no identifiable emotional entanglements until late in life,⁹⁵ and a small household, chiefly his manservant Pedro Manuel, who had come to him in the early 1760s in the Philippines,⁹⁶ and latterly Edward Baily and his wife to keep house.⁹⁷ Dalrymple moved from the Pigot house in Soho Square in 1780 or early 1781 to 72 Titchfield Street, north of Oxford Street.⁹⁸ By mid-1789 he had moved again to High Street, Marylebone,⁹⁹ to premises which he leased from the Duke of Portland, with various parcels of land, on one of which he built a free-standing library.¹⁰⁰

Dalrymple maintained less frequent contact with Newhailes after his mother's death in 1770.¹⁰¹ The elder brother Davy of his youth had become Lord Hailes, and, though Dalrymple sent his brother copies of his publications for the Newhailes library,¹⁰² surviving letters show that a closer contact was with his nearest sister, Rachel.¹⁰³ His infrequent visits to Scotland ceased altogether,¹⁰⁴ but he continued to

advise his niece Christian on family matters,¹⁰⁵ and he received family visitors in London.¹⁰⁶ He remained close to the families of the Pigot daughters, Sophia and Leonora, who were growing up while Dalrymple was one of the Pigot household from 1765 to 1775.¹⁰⁷ Sophia married Edward Monckton, and Leonora married Claud Russell, both friends of Dalrymple in the Pigot party at Madras, in 1776 and 1777.¹⁰⁸

Dalrymple's circle in London overlapped part of Sir Joseph Banks' larger sphere of contacts, a result of the growing connections between Banks and Dalrymple.¹⁰⁹ Dalrymple was elected to the Royal Society Club in 1777,¹¹⁰ and was among the most regular attenders at the weekly dinners thereafter, often called to sit at Banks' left or right.¹¹¹ The Royal Society and Club, as a social and intellectual milieu, were peculiarly suited to a bachelor of Dalrymple's interests.¹¹² Within this circle, and in Banks' house in Soho Square, Dalrymple was increasingly a focus with Banks, William Marsden and James Rennell for matters oriental and geographical.¹¹³

Though his financial obligations were small,¹¹⁴ Dalrymple's outgoings appear to have been considerable, partly for his health, and partly for his library and his publications. He suffered increasingly from erysipelas,¹¹⁵ and developed a gastric condition best alleviated by drinking 'Cheltenham water'.¹¹⁶ He planned to alter his Marylebone house with a steam heating system for the frequent baths he was obliged to take,¹¹⁷ and he spent from three to eight weeks at the end of each summer at Cheltenham taking the waters.¹¹⁸ The upkeep of the Marylebone property, though leasehold, was a significant concern: at different times Dalrymple was contemplating improvements and necessary repairs.¹¹⁹

The development and maintenance of his library was central to Dalrymple's geographical and literary research and to his East India

Company work, both in subscription to new publications and in his esoteric and antiquarian acquisitions from book-sales and booksellers.¹²⁰ The sale catalogue in four volumes of the sale of books from Dalrymple's library after his death¹²¹ did not reflect the breadth of his collection: what was sold was only the residue of general books after the geographical and nautical materials had been taken by the Admiralty,¹²² and after the oriental collections had gone to Marsden.¹²³ Even Dalrymple's general collection was wide-ranging: with William Herbert he developed his interest in seventeenth-century poetry,¹²⁴ publishing in 1785 a selection of the verse of George Wither¹²⁵ and bequeathing to the British Museum his collection of editions of Wither.¹²⁶

Dalrymple was deeply financially committed to his own publications. After 1779 the East India Company allowed him £500 a year for expenses in publishing charts and nautical memoirs,¹²⁷ but otherwise the costs of his publications, where not subscribed for, he met directly from his personal resources. The bookseller Nourse accounted to Dalrymple personally for the sales of publications;¹²⁸ Dalrymple, as publisher, had himself to meet the cost of keeping his increasing list of charts and nautical memoirs in print.¹²⁹

1779 had marked a more significant change in Dalrymple's life than perhaps he realised. Before then chart compilation and plan publication had been a secondary activity, subordinate to or spinning from his pursuit of a Balambangan or a Madras career; after 1779 Dalrymple was primarily a cartographer and publisher, his developing corpus of knowledge at the centre of his activity and his geographical contributions to questions of the day his asides. After 1791 this shift became more pronounced, with the spread of his interests into the publication of *Oriental Repertory*,¹³⁰ into the preparation of a treatise

on navigation,¹³¹ and into the geography of north-west North America.¹³² With his acceptance of the Hydrographical Office of the Admiralty in 1795 he took on more investigation and evaluative compilation work of the same sort. The first responsibility of Dalrymple as Admiralty Hydrographer was the organisation and arrangement of the results of past surveys, followed by their evaluation and exploitation. The main landmarks in his life after 1779 were therefore those directly connected with one or other of his chartmaking responsibilities.

The esteem in which Dalrymple's expertise was held grew as the standing of his friends and acquaintances increased. He always considered he had the ear of Henry Dundas, later Viscount Melville, on the widest range of matters, from coastal militia and gun platforms in the Napoleonic Wars to the unfair burden of income tax,¹³³ and his Admiralty colleagues Stephens, Nepean and Marsden he always found congenial. But as colleagues rose in administrative rank and retired, Dalrymple remained in the specialist post of Hydrographer, continuing to employ the same geographical skills in publishing charts without prospect of advancement or thought of retirement.

Dalrymple's position at the Admiralty was essentially different from his East India Company work: the surveys he had to assess were essentially of areas unfamiliar to him, and he had an office, office hours and staff.¹³⁴ For the East India Company he worked largely at home, using the collection he had assembled himself over many years, and buying in commercial services of engraving and printing as necessary.¹³⁵ With the combination of his Admiralty and East India Company work, his health deteriorated, though his illnesses were debilitating rather than disabling. By 1805 his servant Pedro Manuel had been admitted to long-term medical care,¹³⁶ and Dalrymple himself was deriving comfort at Cheltenham from the companionship of Mary Selby, a spinster of

seventeen, whom he made his joint residuary legatee in October of that year.¹³⁷ In 1805 Dalrymple received visits in London from his niece Christian, who was spending the spring from Newhailes at Exmouth:¹³⁸ Christian's diary emphasises the quietness of the life the 67-year-old Dalrymple lived in London. Banks, Marsden and the Royal Society Club apart, Dalrymple was slowly outliving his generation.

The Admiralty too was changing: Henry Dundas (as Viscount Melville) was censured by Parliament, resigned as First Lord and underwent impeachment in 1805,¹³⁹ and Sir Philip Stephens' retirement from the Board in October 1806 ended an association which Dalrymple had valued for forty years.¹⁴⁰ Sir Charles Middleton (as Lord Barham), Grey, and Thomas Grenville passed rapidly through the post of First Lord, none remaining more than a few months.¹⁴¹ Lord Mulgrave's appointment as First Lord in April 1807 brought John Barrow back into the Second Secretaryship, a position which had changed with the ministry after Marsden's promotion to First Secretary on Nepean's departure in January 1804.¹⁴² When Marsden retired on grounds of ill-health in June 1807,¹⁴³ to be replaced by William Wellesley Pole, the 'office memory' of Dalrymple's achievement since 1795 was erased. The Board, through Pole, had a different concept of the function of the Hydrographical Office, as an office for assessing the products of the London map and chart trade, and as an agency for supplying 'bought-in' charts in wholesale quantities for fleet use.¹⁴⁴

Dalrymple's working relationship with Pole deteriorated into frigid politeness, punctuated by explosions, as Dalrymple persisted that he was not qualified, nor his office equipped, to carry out the new functions arbitrarily required.¹⁴⁵ Dalrymple's position was not helped by his criticising Mulgrave's competence in print.¹⁴⁶ He found himself bypassed by the new Chart Committee, set up with alacrity by the Board

when he suggested an advisory body of naval officers to evaluate current charts.¹⁴⁷ The pretext for Dalrymple's dismissal, for declining to hand over to the Chart Committee the confidential copies he had taken of the observations to accompany the charts of D'Entrecasteaux's voyage which he had held for a short time in the 1790s, is recorded in Dalrymple's letters, in Admiralty correspondence and in the dossier of papers formed to justify his dismissal.¹⁴⁸ Though his judgment was beginning to weaken in 1808, in the last year before his dismissal on 28 May and his death on 19 June at the age of 71 he was still producing, for the East India Company and for the Admiralty, charts, sailing directions and other publications of the quality which he had maintained over the previous thirty years. It is a consideration of this continuous output, as much as a history of the unrelated controversies in which he had become involved during his life, which is necessary for a full evaluation of Dalrymple's lifetime of work.

NOTES TO CHAPTER 1: 'A CHILD OF THE COMPANY'

* '... knowing that I have never been unfaithful to the Company, I cannot have the smallest objection on my own part to undergo the most Publick Scrutiny, and, considering myself as a Child of the Company, I am not at all apprehensive of the temperate decision of That Parent.' (*To the Proprietors of East-India Stock* 1775, p. 6). In this plea for reinstatement to Company service Dalrymple used the phrase which he had found in Company records some years earlier: 'I remember, when I was a boy at Madrass, to have read in the old records, a letter from the Court of Directors with a glow of pleasure: when they appointed Mr. Higginson a factor, they said, "They hoped none of their servants would take this amiss; for that his father had been a good and faithful servant, and that they considered the son as a child of the Company's.'" (*A Letter to the Court of Directors ... concerning the Proposed Supervisorship* 1769, p. 10).

¹ *The Scots Peerage*, s.n. Dalrymple, Earl of Stair.

² 'Memoirs of Alexander Dalrymple, Esq.', *The European Magazine and London Review* 42 (1802), pp. 323-328, *321-*327, and 421-424, particularly p. 324. As an autobiographical account, 'Memoirs' is the chief source for the first part of Dalrymple's life: for it he drew extensively on three statements (*The Memorial of Alexander Dalrymple* 1768, *Case of Alexander Dalrymple, Esqr.* 1784, and *Memorial of Alexander Dalrymple* 1791) he made in support of particular claims for standing or reward. The 'Memoirs' in turn formed the basis of posthumous accounts in biographical dictionaries and journals, for example: 'Biographical Memoir of Alexander Dalrymple, Esq., late Hydrographer to the Admiralty', *The Naval Chronicle* 35 (1816), pp. 177-204. The manuscript of such an updated account of Dalrymple's life survives in the Newhailes Papers (Edinburgh, National Library of Scotland [NLS]: MS. 25292). It would be unusual to treat such an account as equivalent to a primary source, were it not that, at every point at which it has been possible to check it against contemporary documents, it has been corroborated. Alexander and his younger brother William were boarding pupils at Mr. Young's school at Haddington, according to the Martinmas 1752 account (NLS: MS. 25283, f. 120r (see note 4 below)).

³ Bond of Provision, Sir James Dalrymple to Alexander Dalrymple his son (Newhailes Papers (NLS: MS. 25283, ff. 84-85)). The principal was to remain part of the Newhailes estate descending to the eldest son David, each child drawing an annual rent for living expenses.

⁴ The *sederunts* of 'the Tutors and Curators of the Children under age of Sir James Dalrymple' survive for 16 March 1752, 27 November 1752 and 31 May 1754 (Newhailes Papers (NLS: MS. 25283, ff. 119-120)). At the instigation of the Tutors and Curators, the five children (John, Alexander, William, Rachel and Magdalen) executed a bond of commission in June 1751 for Lady Christian to receive the annual rents due to each of them, and to account for their daily expenses.

⁵ *Sederunt* of the Tutors and Curators of the Children of Sir James Dalrymple, 16 March 1752 (Newhailes Papers (NLS: MS. 25283, f. 119r)). William Baker was chairman of the Company in 1752 (East India Company, Court Minutes, 10 April 1752 (London, India Office Records [IOR]: B/72, p. 4)).

⁶ 'Memoirs of Alexander Dalrymple, Esq.', p. 324.

⁷ *Sederunts of the Tutors and Curators of the Children of Sir James Dalrymple*, 16 March and 27 November 1752 (Newhailes Papers (NLS: MS. 25283, ff. 119-120)); 'Memoirs of Alexander Dalrymple, Esq.', p. 324.

⁸ East India Company, Writers' Petitions 1749-1752 (IOR: J/1/1, ff. 341-344); East India Company, Court Minutes, 1 November 1752 (IOR: B/72, p. 186). Alexander's securities for £500, James Baird of Downing Street and Thomas Wilson of Craven Street, were approved on 8 November (East India Company, Court Minutes (IOR: B/72, p. 195)). James Baird appears in the circumstance of an anecdote in 'Memoirs of Alexander Dalrymple, Esq.' (p. 324) datable to the autumn of 1752. Alexander's aunt, Janet St. Clair, accounted to Sir David Dalrymple for 'equipping and furnishing out his brother Alexander for the East Indies, paying his freight thither & settling him there' (*Sederunt of the Tutors and Curators of the Children of Sir James Dalrymple*, 27 November 1752 (Newhailes Papers (NLS: MS. 25283, ff. 119v-120r))).

⁹ 'Memoirs of Alexander Dalrymple, Esq.', p. 324. Dalrymple appears fourth, after three China supercargoes, in the passenger list of the *Suffolk* (East India Company, Marine Records, Journal of the *Suffolk*, 1752-1754 (IOR: L/MAR/B/397B)). Thomas Wilson also acted as security for Dalrymple's writership (see note 8 above).

¹⁰ 'Memoirs of Alexander Dalrymple, Esq.', p. 325. The form, though not the content, of the flippant letter he wrote to his sister Janet in October 1753 (Newhailes Papers (NLS: MS. 25286, ff. 1-2)) suggests that he was already learning the layout and superficialities of official despatches.

¹¹ Pigot had held the chiefship of Vizagapatam, and was to replace Thomas Saunders as Governor of Madras in January 1755 (H. D. Love, *Vestiges of Old Madras 1640-1800*, 3 vols. and index (London, 1913), vol. ii, p. 436).

¹² 'Memoirs of Alexander Dalrymple, Esq.', p. 325.

¹³ Pigot was appointed a writer in 1736, and arrived at Madras in July 1737. He never married, and, besides his two natural daughters presumed to have been born in the 1750s in India, he later had two natural sons Richard and Hugh born in England in 1774 and 1775 (*Dictionary of National Biography*).

¹⁴ *Memorial of Alexander Dalrymple* 1791, p. 1. Dalrymple's rotation through a number of routine Madras appointments begins after Pigot's assumption of the Governorship.

¹⁵ *Memorial of Alexander Dalrymple* 1791, pp. 1-2. Pigot's appointment of Dalrymple to be assistant to Edwards seems to have been part of a larger plan, possibly to provoke Edwards into a refusal which could lead to his suspension (see *The Case of Mr. Edwards* (India Office Records, Home Miscellaneous Series (IOR: H/62, pp. 27-28))). Dalrymple remained as assistant, first under Edwards' temporary replacement William Perceval, and then nominally so under the reinstated Edwards.

¹⁶ *Memorial of Alexander Dalrymple* 1791, p. 2.

¹⁷ *Memorial of Alexander Dalrymple* 1791, p. 2. Dalrymple also held the appointment of Accountant to the Mayor's Court in 1757.

¹⁸ *Memorial of Alexander Dalrymple* 1791, p. 2; Edwards to Walter Holt,

1 March 1758 (IOR: H/62, pp. 5-8). While Sub-Secretary he was again nominated assistant to the Assay-Master, as Pigot renewed his attempt to control Edwards. Dalrymple used his previous experience and an assaying textbook to instruct the replacement John Pybus, though not to the satisfaction of either Edwards or the Company in London.

¹⁹ Alexander Dalrymple to Sir David Dalrymple, 24 October 1757 (Newhailes Papers (NLS: MS. 25293, ff. 15-18)).

²⁰ Alexander Dalrymple to Sir David Dalrymple, 24 October 1757 (Newhailes Papers (NLS: MS. 25293, ff. 15-18, particularly f. 17r)): 'Mr. Pigot's Kindness to me makes my Situation very agreeable.'

²¹ 'Memoirs of Alexander Dalrymple, Esq.', p. 325. This friendly relationship flourished despite differences between Pigot and Orme, and continued in London after Orme's withdrawal from Madras in 1758 (Love, *Vestiges of Old Madras*, vol. ii, pp. 517-519, and see note 37 below). Dalrymple reported on Madras affairs to Orme by letter in 1776 (IOR: MSS. Eur. Orme O.V.171, pp. 1-21).

²² Dupré had requested to have Dalrymple appointed Sub-Secretary ('Memoirs of Alexander Dalrymple, Esq.', p. 326), and offered to relinquish the Secretaryship to Dalrymple in February 1759 (*Memorial of Alexander Dalrymple* 1791, p. 4).

²³ 'Letter concerning the Negrais Expedition; and concerning the adjacent Countries', *Oriental Repertory: [Volume I] Number 2* 1791, pp. 97-128; 'Abstract of Letters Received, at Fort St. George, from the earliest Records remaining, to the year 1744', *Oriental Repertory: Volume 2 Number II* 1794, pp. 169-200. Dalrymple also used the results of these researches in *Plan for Extending the Commerce of this Kingdom* 1769 (Catalogue A5).

²⁴ East India Company, Marine Records, Journal of the *Pitt*, 1757-1760 (IOR: L/MAR/B/525A). Wilson had made one intervening visit to Madras, in the *Suffolk* in July 1756 (East India Company, Marine Records, Journal of the *Suffolk*, 1755-1757 (IOR: L/MAR/B/397C-397D)).

²⁵ Wilson's route is discussed in R. P. Crowhurst, 'The Voyage of the *Pitt* - A Turning Point in East India Navigation', *The Mariner's Mirror* 55 (1969), pp. 43-56, and by H. T. Fry, *Alexander Dalrymple (1737-1808) and the Expansion of British Trade* (London, 1970), pp. 16-19. Crowhurst was unaware of 'Memoirs of Alexander Dalrymple, Esq.' in *The European Magazine*, and Fry relied quite heavily on A. H. Carrington's draft typescript 'Alexander Dalrymple, F.S.A., F.R.S. 1736-1808: An account of the Life and Work of the First Naval Hydrographer'. In his own account Dalrymple was careful not to overstate his influence: Wilson, before he arrived at Madras, had been discussing the theory of an eastern passage with his passenger for Manila, Colonel Sir William Draper, and, on resuming contact with Dalrymple, included him in the discussion. Dalrymple added the authority of John Saris' 1613 voyage to Wilson's proposal to Pigot ('Memoirs of Alexander Dalrymple, Esq.', p. 326).

²⁶ 'Memoirs of Alexander Dalrymple, Esq.', pp. 326-327. Dalrymple implies that his advice was influential in Pigot giving Wilson the freedom to choose his route. Crowhurst's hypothesis that Wilson had formulated his plan before reaching the Strait of Malacca shows that he was unaware that instructions to outbound East Indiamen were generally subject to change or confirmation by the Governor when calling at

Madras.

27 *Memoir concerning the Passages to and from China* 1782 (Catalogue A72); *Memoir concerning the Passages, at a Late Season, from India to China* 1788 (Catalogue A152); Catalogue B186 800511 Pitts Strait views.

28 Dalrymple's train of thought is not wholly clear, even in his own accounts. The value of his advice to Wilson was still an unknown quantity when he made his proposal. He had apparently been influenced by his reading in the old records of the Company's historical interest in the trade of south-east Asia, and he reported buying 'some Spanish histories of the Philipinas' from the estate of William Roberts, previously a supercargo to Manila, who was killed in the siege of Madras early in 1759 ('Memoirs of Alexander Dalrymple, Esq.', p. 327).

29 Pigot had the support of the Secret Committee at Madras, and later justified his action as following from the Court of Directors' authority empowering him to use vessels clandestinely as necessary for the security of the China ships. Recognising that part of the doubly-hidden agenda of the voyage was to reconnoitre trading opportunities in the interstices between the Dutch and the Spanish spheres of influence, Pigot provided a cargo privately for the *Cuddalore*, making over three-fourths of the profits to Dalrymple on the eve of departure, so that neither could later be accused of a financial interest in having proposed or ordered the voyage (Fry, *Alexander Dalrymple*, p. 25).

30 The *Cuddalore* voyage (22 April 1759–28 January 1762) provided material for many of the plans and plates of views which Dalrymple published later, and the movements of the *Cuddalore* can therefore be largely reconstructed from Dalrymple's publications. For example, the extent of his exploration on the coast of Cochin-China is shown on two printed charts: Catalogue B842 971101 Cochin China and B934 020307 Cochin China. His visit to Zamboanga in October 1761 to meet the Spanish Governor Don Manuel Galves is recorded on an unpublished track chart: Catalogue B249 810924a Luzon.

31 For the loss of the *Griffin*, see Charles Daggett and Christopher Shaffer, *Diving for the Griffin* (London, 1990), pp. 1–7 and 89–95.

32 For James Rennell, see Andrew S. Cook, 'Major James Rennell and A Bengal Atlas (1780 and 1781)', *India Office Library and Records Report for the year 1976* (London, 1978), pp. 5–42, especially p. 6. Rennell's fair copy of his journal of the London voyage (10 June 1762–18 March 1763) is at London, British Library [BL]: Add. MS. 19299.

33 Papers concerning Dalrymple's negotiations at Sulu, and copies of his agreements over Balambangan are in two compilation volumes in the East India Company records (IOR: G/4/1 and H/771).

34 Fry, *Alexander Dalrymple*, p. 66. Dalrymple left Madras on 5 July 1763.

35 An interesting sidelight on Dalrymple's activities in the last days before the rendition of Manila is provided by James Bean, a seaman in Manila in 1764 with hopes of becoming a free merchant, in a letter from Cochin China to Sir James Grant of Grant, 15 January 1765 (Seafield Estate Papers (Edinburgh, Scottish Record Office [SRO]: GD/248/49/3/7)): 'The Counsellors, unexperienc'd and young, made choice of one Mr. Dalrymple for their Govr.; a man that has been acting Don Quixote by Sea these seven years past. He has been a great

promoter of mischief in this Place, altho' he had not the least business in it, and was very fond of this Honor, to which he was no more intitled than the Bark he commanded: However, contrary to all rules and order, they made a Govr. who was to act for a day. Puff'd up with his new dignity he advanc'd to the Parade in the Evening, and had the little sense and great presumption to read out public orders to the Military, which was found such an unwarrantable act that the Halbert was fix'd and the Cats prepar'd to treat him with a hearty flogging, which his Worship perceiving snaked off with as much fear and trembling as Don Quixote after a real drubbing. Severe letters and mighty threats pass'd now between this Govr. and the Commandants; both were so full of their Consequence as to become the laughter of the Spectators.'

³⁶ East India Company, Marine Records, Journal of the *Latham*, 1763-1765 (IOR: L/MAR/B/482C).

³⁷ East India Company, Court Minutes, 28 November 1765 (IOR: B/81, p. 268); Dalrymple to Court of Directors, 26 November 1765 (East India Company, Miscellaneous Letters Received, 1765 (IOR: E/1/47, pp. 135-136)). A draft of Dalrymple's letter survives in Robert Orme's collection (IOR: MSS. Eur. Orme O.V.88, pp. 1-24). Dalrymple's letter was referred to the Committee of Correspondence without reply.

³⁸ He gave a receipt on 7 October to his brother David for the residue of the money owed to him by his father's bond of provision (see note 3 above). It was probably on this visit, rather than later, that John Thomas Seton was commissioned by the family to paint Alexander's full-length seated portrait in oils.

³⁹ In February 1767 he was inviting D'Après de Manneville to reply to him at Lord Pigot's Soho Square address (Dalrymple to D'Après, 12 February 1767 (Paris, Archives Nationales [AN]: Marine 3JJ 340(3))). *Mr. Dalrymple's Observations on Dr. Hawkesworth's Preface to the Second Edition 1773* (Catalogue A29) was written dated from the Pigot country house at Patshull, Staffordshire, in September 1773. The inference from Dalrymple's letter of 25 April 1774 to Matthew Boulton (Birmingham Reference Library, Archives Department [BRL]: Matthew Boulton Papers, Letter D22) is that the rolling-press which Dalrymple had bought from Boulton was installed at the Soho Square address from which Dalrymple was writing.

⁴⁰ 'Memoirs of Alexander Dalrymple, Esq.', p. *324.

⁴¹ Dalrymple to Earl of Chatham, 24 November 1766 (Chatham Papers (London, Public Record Office [PRO]: PRO.30/8/31, f.11)): 'Having had five years experience in voyages of this kind, thro seas unknown, and amongst people with whom we had before no intercourse, I presume to think myself qualified to be usefully employed on such an undertaking. At the same time I am not insensible, notwithstanding the instances of Dampier, Halley &ca. how foreign to rules of Office it is, to form the most distant expectation, that a person may be employ'd in the publick Service by sea, who has no rank in the Navy.' Notwithstanding Fry's claim (*Alexander Dalrymple*, p. 113n) that Dalrymple wrote this letter to Shelburne, there is no indication in the mode of address that Dalrymple did not address it to Pitt. For Dalrymple's communication with Shelburne, see note 42 below.

⁴² Adam Smith to Lord Shelburne, 12 February 1767 (E. C. Mossner and I. S. Ross (ed.), *The Correspondence of Adam Smith* (Oxford, 1977),

pp. 122-124): 'Whether this [Southern] continent exists or not may perhaps be uncertain; but supposing it does exist, I am very certain you will never find a man fitter for discovering it, or more determined to hazard everything in order to discover it. The terms that he [Dalrymple] would ask are first, the Absolute command of the Ship with the naming of all the officers in order that he may have people who both have confidence in him and in whom he has confidence; and secondly that, in case he should lose his ship by the common course of accidents before he gets into the South Sea, that the Government will undertake to give him another. These are all the terms he would insist upon. The ship properest for such an expedition, he says, would be an old fifty gun ship without her Guns. He does not, however, insist on this. as a sine qua non, but will go in any ship from an hundred to a thousand tons.' Dalrymple owed to his brother David the introduction to Adam Smith.

⁴³ Fry, *Alexander Dalrymple*, p. 117, citing London, Royal Society [RS]: Council Minutes, vol. 5. Dalrymple had attended meetings of the Royal Society in March 1766 and February 1767 as the guest of the secretary Dr. Morton, who had subsequently presented Dalrymple's short communication 'On the Formation of Islands' at the 2 July 1767 meeting (RS: Journal Book, 2 July 1767). In June 1767 Dalrymple had written to Thomas Saunders, Deputy Chairman of the East India Company, canvassing support 'regarding some Propositions for a voyage to the South Seas in order to make some discoveries which may tend to the Company's advantage', though without success (East India Company, Court Minutes, 30 June 1767 (IOR: B/83, p. 186)).

⁴⁴ Catalogue A1. Dalrymple had been compiling *Historical Collection of the several Voyages and Discoveries in the South Pacific Ocean* (Catalogue A11-A12), and extracted information, chiefly from the planned second volume, for separate issue in 1767. He wrote of the *Account* in 1769: 'Above two years ago I printed a few copies of a tract on the Discoveries made in the South Pacifick Ocean; which, however, I did not publish till lately, when it was reported that the French had discovered the continent. Motives, which it is unnecessary to lay before the public, induced me to print the tract above mentioned, in a very imperfect state; it is not only deficient in the arrangement, but as everything not immediately relative to a Southern Continent was omitted, nothing is inserted to the westward of the intersection of Schouten's track by that of Tasman.' (*Historical Collection of the several Voyages and Discoveries in the South Pacific Ocean, Volume I 1769/1770*, pp. vii-viii). The first part of the preface to the *Account* is a third-person autobiographical statement that the author 'was solicitous to be engaged on discovery in the South Sea', and 'to recommend himself to this employment, so much wished for', terms applicable to Dalrymple's 1767 situation (*An Account of the Discoveries made in the South Pacifick Ocean 1767*, p. viii).

⁴⁵ Fry, *Alexander Dalrymple*, p. 121, citing RS: Council Minutes, vol. 5.

⁴⁶ See note 44 above. A later part of the preface to *Account*, reading 'The Author having been disappointed in his hopes, is under the necessity to forego all thoughts of being employed in the manner he wished, either immediately in the service of the government, or in that of the East-India Company: but at the same time, the least he could do, in justice to the publick and himself, was to communicate to the world what lights he had acquired, ...' (p. xii), is consonant with Dalrymple's

1769 situation, not that of 1767, and indicates that the preface was rewritten and extended for the 1769 publication. The second volume of *Historical Collection* reprinted the analytical sections of the 1767 *Account*, and Dalrymple offered to take back copies of the earlier work, allowing the purchase price as credit against subscriptions to *Historical Collection* (advertisement leaf).

⁴⁷ *An Account of what has passed between the India Directors and Alexander Dalrymple* 1768, second edition 1768/1769, p. 2n: 'In April last, the Deputy Chairman ... shewed me an abstract he had made of my Plan, which had been communicated to him some months before, though without my knowledge or consent.'

⁴⁸ *An Account of what has passed between the India Directors and Alexander Dalrymple* 1768, second edition 1768/1769, pp. 13-27. Dalrymple dated his paper 29 July, and submitted it on 3 August.

⁴⁹ East India Company, Miscellaneous Letters Received, 1768 (IOR: E/1/51, pp. 32-32k). The memorial, as reprinted in *An Account of what has passed* 1768, first edition, p. 49, was dated 26 August 1768, and was referred by the Court of Directors to the Committee of Correspondence on 31 August 1768 (East India Company, Court Minutes, 31 August 1768 (IOR: B/84, p. 189)). *The Memorial of Alexander Dalrymple* 1768 (Catalogue A2), as published separately, enlarged upon the officially submitted memorial, carrying the narrative forward to October 1768.

⁵⁰ *An Account of what has passed between the India Directors and Alexander Dalrymple* 1768, second edition 1768/1769, p. 58 ('... the Chairman told me "the expedition was not dropt, but the consideration postponed; ...') and p. 60 ('The Deputy also told me, "that the undertaking was not dropt, even as the resolution now stands: that a kind of middle measure was adopted, neither giving it up, nor executing it as first proposed.').

⁵¹ Dalrymple notified on 5 October his intention to publish his plan (East India Company, Miscellaneous Letters Received, 1768 (IOR: E/1/51, pp. 62-62a); East India Company, Court Minutes, 5 October 1768 (IOR: B/84, p. 230)). He was told at a Committee of Correspondence on 7 October that 'all publication was improper', and, after an altercation with a committee member, was instructed to surrender all documents he had retained concerning Balambangan (*An Account of what has passed between the India Directors and Alexander Dalrymple* 1768, second edition 1768/1769, pp. 77-103; East India Company, Court Minutes, 5, 12 and 26 October 1768 (IOR: B/84, pp. 230, 244 and 262); East India Company, Miscellaneous Letters Received, 1768 (IOR: E/1/51, pp. 71-71c and 84-84e)). The first or 1768 edition of *An Account of what has passed between the India Directors and Alexander Dalrymple* was printed immediately thereafter: it was dated 26 October 1768, and the Company's legal adviser reported on 28 October that he had read a copy of 'the Pamphlet entitled &c relative to a Plan for an Establishment at Balambangan by Mr. Dalrymple' (East India Company, Legal Adviser's Papers, Mr. Sayer's opinion relative to Mr. Dalrymple's Pamphlet, 28 October 1768 (IOR: L/L/7/123)).

⁵² East India Company, Legal Adviser's Papers, Mr. Sayer's opinion relative to Mr. Dalrymple's Pamphlet, 28 October 1768 (IOR: L/L/7/123): 'I am clearly of opinion, that if Mr. Dalrymple is a Writer, or at this time, in any superior place or Office in the Company's Service, the publication of this Pamphlet is a notorious breach of his Covenant, but

in the 43d page of it, He says, He wrote a Letter requesting permission to go to England, but the Governor thinking it improper, desired him to request leave to resign only in common form, and in page 1744 [error for '44'] He resigned accordingly the 1763 [date incomplete in printed source]. I pay no regard to the tender manner of wording this resignation; but am of opinion, that from that day He ceased to be in the service of the Company as to the Place or Office He was then employed in, and that all the covenants relative to any future employment in that place or Office were at an end; and altho' Mr. Dalrymple had almost ever since been employed in the business of the Company, yet He does not appear to me, to have been continued as a Writer, or to have been appointed to any superior place or Office within the intention & meaning of the Covenants. I therefore think that however improper or indecent the publication of this Book may be thought, He is not by so doing, guilty of a breach of any Covenant.'

⁵³ Catalogue A2, A4 and A5. Dalrymple revised and extended *An Account of what has passed*, publishing it for the General Court on 4 January 1769. The extended version continues the narrative to 26 October, and prints a letter of 25 November 1768. At least one example is known with a 1768 title-page. Dalrymple issued *An Account of what has passed with Plan for extending the Commerce of this Kingdom* in the spring of 1769 in a few copies, bound together in red leather (see BL: 280.h.22, and London, School of Oriental and African Studies [SOAS]: EB.76.31. 52386).

⁵⁴ East India Company, Court Minutes, 28 June 1769 (IOR: B/85, pp. 88-89). Dalrymple had reminded the Court, in a further memorial of 28 April, that his August 1768 memorial had gone unanswered and that he was continuing to lose £500 a year by not being permitted to return to Madras (East India Company, Miscellaneous Letters Received, 1769 (IOR: E/1/52, pp. 170-170a); East India Company, Court Minutes, 27 April 1769 (IOR: B/85, pp. 22-23)). The Company at first worded the gratuity as a payment 'in full Consideration for his past Services and of all Demands and Expectations', but Dalrymple insisted that the wording should be changed so as not to rule out future expectations (*Memorial of Alexander Dalrymple* 1791, pp. 26-27).

⁵⁵ Dalrymple bought £500 of East India Stock on 12 June 1769 (East India Company, Stock Ledger 1767-1769 (IOR: L/AG/14/5/16, p. 218)). When the voting minimum was doubled to £1000 by the 1773 Regulating Act, he immediately increased his holding to £1000, visiting East India House in company with Lord Pigot on 1 October 1773 to sign the transfer book in person (East India Company, Stock Transfer Book, 1773-1776 (IOR: L/AG/14/5/104, pp. 15-16); East India Company Stock Ledger 1769-1774 (IOR: L/AG/14/5/18, p. 211)). Dalrymple sold his holding on 20 April 1775 before leaving for Madras (Stock Ledger 1774-1783 (IOR: L/AG/14/5/20, p. 209)).

⁵⁶ See, for example, his note in *Catalogue of Authors who have written on Rio de la Plata, Paraguay, and Chaco* 1807, p. 16: 'Above 40 years ago I purchased from Mr. Thomas Davies, Russel Street, Covent Garden, 2 Volumes of Spanish printed Memorials and MSS, which had belonged to the celebrated M. Colbert, the French Minister.' A significant part of his correspondence with William Herbert concerns antiquarian books and book-sales (John Nichols, *Illustrations of the Literary History of the Eighteenth Century*, 8 vols. (London, 1817-1858), vol. iv, pp. 545-550).

⁵⁷ Dalrymple printed extracts from two letters from Charles De Brosses (author of *Histoire des Navigations aux Terres Australes*, 2 vols. (Paris, 1756)) in response to the *Monthly Review* critic in *An Historical Collection of the several Voyages and Discoveries in the South Pacific Ocean*, volume I 1769/1770, p. xxxii.

⁵⁸ Dalrymple's letters to D'Après de Manneville, hydrographer to the French East India Company, are preserved, somewhat disordered, in the present arrangement of D'Après' papers in the Archives Nationales in Paris (AN: Marine 3JJ 331, 337, and 340-341, and Marine 4JJ 127). Drafts of a few replies are present, and some of the manuscript enclosures to Dalrymple's letters are at AN: Marine 6JJ 63(144-159).

⁵⁹ 'A Gentleman well versd in Mathematical & Geographical knowledge, & translator of Voyages to the South Seas & other Places, from Spanish' (RS: Certificates 1767-1778 III). For his attendance see RS: Journal Book 1770.

⁶⁰ RS: Certificates 1767-1778 III.

⁶¹ Dalrymple to D'Après, 11 July 1769 (AN: Marine 3JJ 340(4)): 'A Friend of mine (Dr. Franklin) who went to Paris a few days ago carried the two Acromatick Glasses.'

⁶² *The Country called, in the Maps, New Zeland ... 1771* (Catalogue A19).

⁶³ The Court of Directors consistently stonewalled Dalrymple's approaches in the second half of 1769: East India Company, Court Minutes, 25 July, 23 August, 22 September, 29 November and 13 December 1769 (IOR: B/85, pp. 125, 181, 238, 317 and 348-349). Dalrymple's direct approach to Lord Weymouth (Dalrymple to Lord Weymouth, 27 April 1770 (IOR: H/102, pp. 71-72)) unblocked the Court, and in July Dalrymple and Thomas Howe proposed to go to Balambangan 'in joint commission' (East India Company, Court Minutes, 11 July 1770 (IOR: B/86, p. 90)).

⁶⁴ East India Company, Court Minutes, 5 September 1770 (IOR: B/86, pp. 150-151).

⁶⁵ East India Company, Court Minutes, 21 March 1771 (IOR: B/86, pp. 421-422): 'The Court considering that an Establishment at Balambangan must require the greatest Address, Moderation and Judgment, and that the Persons principally employed in that Expedition should pay a due deference and Obedience to the Orders of this Court, and Mr. Alexander Dalrymple, from his Conduct of late, appearing to be a very improper Person to be employed in that Undertaking, Resolved unanimously That he be dismissed the Company's Service.' Dalrymple had been constructively involved, in providing an artist and a baker, until the disagreements in March 1771 over the appointment of a factor and over the starting date for his salary (East India Company, Court Minutes, 6, 15 and 19 March 1771 (IOR: B/86, pp. 398, 409 and 414)).

⁶⁶ *A Collection of Voyages chiefly in the Southern Atlantick Ocean* 1775, introduction. As the southern Atlantic Ocean lay outside the area of East India Company monopoly, Dalrymple addressed his proposal in 1772 to Lord North, with whom he achieved an inconclusive interview on 13 August (see chapter 3, p. 70, n. 3).

⁶⁷ *A Letter from Mr. Dalrymple to Dr. Hawkesworth* 1773; *Mr. Dalrymple's Observations on Dr. Hawkesworth's Preface to the Second Edition* 1773. The publication in June 1773 of John Hawkesworth's edition of the

journals of James Cook's first voyage (in *An Account of the Voyages undertaken ... for making Discoveries in the Southern Hemisphere*, 3 vols. (London, 1773), vols. ii-iii) caused a fierce and immediate reaction from Dalrymple. Amid general public criticism of Hawkesworth's prurience and heresy, Dalrymple criticised severely Hawkesworth's rewriting of the accounts, both the omission of much daily journal material and his addition of his own commentary.

⁶⁸ *A Letter to the Proprietors of India Stock, concerning the proposed Supervisors* 1769; *A Letter to the Court of Directors ... concerning the proposed Supervisorship* 1769; *A Second Letter concerning the proposed Supervisorship* 1769; *Vox Populi Vox Dei. Lord Weymouth's Appeal ... considered* 1769 (Catalogue A6-A9).

⁶⁹ Dalrymple reacted to Governor Johnstone's pamphlet on the finances of Indian administration, *Thoughts on our Acquisitions in Bengal* of 1771, which quoted significantly from *A Second Letter concerning the Supervisorship* 1769, by publishing *Considerations on a Pamphlet* 1772. Instinctively opposed to the diminution of Company authority by the Crown, he issued in December 1772 *A General View of the East India Company*, stated to have been written in January 1769. Pigot's suggestions for a working government for India appeared in the untitled pamphlet *I am always inclined to respect the institutions of every Community ...* [1772], which depended from a long quotation by Johnstone. Dalrymple amplified and republished the last part of *A General View*, on the Company's charter rights to acquire territorial revenues in India, in May 1773, at the Company's expense, in *The Rights of the East India Company*. In none of these pamphlets did Dalrymple's name appear as author (In *Considerations on a Pamphlet* he sought to disguise his connection with the authorship of the 1769 tract), and he first avowed them in print fully twenty years later (*Catalogue of Printed Books and Tracts* 1792).

⁷⁰ East India Company, Court Minutes, 1 March 1775 (IOR: B/90, p. 463).

⁷¹ East India Company, Court Minutes, 3 March 1775 (IOR: B/90, p. 470). Dalrymple stated that the Chairman and Deputy had advised him to make a specific application (*To the Proprietors of East-India Stock* 1775, p. 4). There is evidence that Dalrymple was reserving his position as early as 1772, in his letter to his brother David of 25 December 1772 (Newhailes Papers (NLS: MS. 25293, ff. 43-44)): 'I ... do not see any thing at present like a certainty of going abroad. I lately gave in a plea against an intended appointment of one McGuire to the succession at Madrass, as I was next in succession if the present Council were all thought unfit; I ought to have sent a copy of this letter but as I had not the smallest imputation that the Directors wd. appoint me to that succession I only meant it to prevent an improper appointment & to lay in my claim hereafter when by standing I become entitled to it. My letter threw them all aback & prevented the immediate appointment and since other circumstances have occurred which will I believe set it aside for ever.'

⁷² The legal opinion given to the Court was that, according to the provisions of the Regulating Act of 1773 (13 Geo. III c. 63) Dalrymple could be reinstated to Madras after dismissal only by a three-quarters majority of a General Court of Proprietors (East India Company, Legal Adviser's Papers, Mr. Sayer's Opinion on Mr. Dalrymple's Case (IOR:

L/L/7/204, ff. 12-14)). Dalrymple achieved this on 6 April (East India Company, Court Minutes, 21 March and 6 April 1775 (IOR: B/90, pp. 505-506 and 540-542)), though it took a further vote to restore him to his seniority (Court Minutes, 7 and 10 April 1775 (IOR: B/90, pp. 544-545 and 546)).

⁷³ East India Company, Court Minutes, 11 April 1775 (IOR: B/90, p. 548). Pigot was a concerned observer of this process, and delayed submitting the list of his household staff for authorisation of free passage to Madras until 12 April, when he could include Dalrymple's servant Pedro Manuel and artist/engraver Benjamin Henry (East India Company, Court Minutes, 12 April 1775 (IOR: B/90, p. 560)).

⁷⁴ East India Company, Marine Records, *Journal of the Grenville*, 1775-1777 (IOR: L/MAR/B/467D).

⁷⁵ A succinct account of this complex affair, so far as it affected Pigot and the new members of the Madras Council in 1776, is to be found in *Dictionary of National Biography*, s.n. Pigot, George.

⁷⁶ See the official compilation *Copies of Papers relative to the Restoration of the King of Tanjore*, volumes I and II 1777. Decisions were conventionally made by a vote of those members of the Council present in Madras, normally excluding Council members out 'on circuit' or designated chiefs of subordinate stations. The allocation of these duties was strictly governed by rota, and it was Pigot's attempt to vary this to keep his majority in Madras which aggravated the situation (see *Every decision of a court of justice ... 1777*, pp. 7-8).

⁷⁷ Pigot's suspension of two council members was the provocation (*Copies of Papers relative to the Restoration of the King of Tanjore*, volume I, pp. 373-377). Pigot argued from detention that decisions of a council without the Governor were invalid, a position which was not strengthened when Bengal (though not Bombay) acquiesced in the authority of Stratton's rump Council.

⁷⁸ Dalrymple's observations in the *Swallow* were appended to *Journal of a Voyage to the East Indies in the Ship Grenville* 1778, p. 30. For the official journals of the *Swallow*, see PRO: ADM.51/4362, ADM.51/4563, and ADM.52/2008. Dalrymple left Madras on 11 October 1776 and arrived at Suez on 5 January 1777.

⁷⁹ The first part of Dalrymple's letter from Alexandria, 19 January 1777 (*Copies of Papers relative to the Restoration of the King of Tanjore*, volume II, p. 1) describes the overland journey from Suez to Alexandria, via Cairo. In unfavourable weather in the Mediterranean, Dalrymple's ship followed the Turkish coast (see Catalogue B1116 Marmorice), arriving at Marseilles on 25 March (East India Company, Court Minutes, 8 April 1777 (IOR: B/92, p. 686); Dalrymple to D'Après, 25 March 1777 (AN: Marine 3JJ 341(15))). After 20 days quarantine, Dalrymple reached Calais on 19 April (D'Après to Dalrymple, 28 April 1777, draft (AN: Marine 3JJ 341(10))), and London by 22 April (*To the Proprietors of East-India Stock* 1775, 22 April handbill).

⁸⁰ *Copies of Papers relative to the Restoration of the King of Tanjore*, volumes I and II 1777 (Catalogue A46) was the official compilation of documents, including copies of Proceedings brought back by Dalrymple. He provided *The very extraordinary revolution ... 1777* as a partial introduction to the official documents, and a series of notes to gloss Lord Pigot's *Narrative* 1777. Dalrymple is thought to have assisted

Admiral Hugh Pigot in the drafting of the various fly-sheets he issued in defence of his brother. See also *Every decision of a court of justice ... 1777* (Catalogue A51), reflecting on the legality of various actions in 1776.

⁸¹ *To the Proprietors of East-India Stock 1777*, 8 May pamphlet (Catalogue A50); *Letter to the Court of Directors of the East India Company 1777* (Catalogue A53). *On the 26th March a general Court ... 1777* (Catalogue A52) is a preliminary version of part of *Letter to the Court of Directors*. Dalrymple's letter from Alexandria of 19 January 1777 was received and read in Court on 18 March, and resulted in a formal decision on 26 March to reinstate Dalrymple, Russell, Lathom and Stone. He objected to the subsequent proposal that Pigot's group should be treated similarly to the 'usurpers' in being recalled for an investigation of their conduct.

⁸² Unofficial intelligence was causing Dalrymple concern when he wrote to D'Après in January 1778 (Dalrymple to D'Après, 23 January 1778 (AN: Marine 3JJ 341(16))): 'As there have been many reports in England concerning Lord Pigot at Madrass said to come by French Ships ...', but on 17 February he was reporting Pigot's death 'after a long illness' (Dalrymple to D'Après, 17 February 1778 (AN: Marine 3JJ 341(16))).

⁸³ In June 1777 Dalrymple advanced his name to be one of the messengers to take to Madras the recall notice and the order for Pigot's release, and was authorised by the Court to do so (East India Company, Court Minutes, 3 June 1777 (IOR: B/93, pp. 141-142); Lucy S. Sutherland, *The East India Company in Eighteenth-Century Politics* (Oxford, 1952), p. 327n.), but he was almost immediately replaced. The Council members of the Pigot group, including Dalrymple, were eventually cleared of any wrongdoing by the Court in May 1780 (East India Company, Court Minutes, 24 May 1780 (IOR: B/96, pp. 103-104).

⁸⁴ The Act as passed (24 Geo. III c. 25) included (s. 63) the provision in the bill unchanged. The Act allowed two avenues of exception: an officer might return to a position in India after an absence of more than five years if he either satisfied the Board of Control and the Court of Directors that his prolonged absence had been for reasons of health, or if he was appointed by the Court with a three-quarters majority of a special General Court of Proprietors.

⁸⁵ East India Company, Court Minutes, 27 July 1784 (IOR: B/100, p. 229). The Court considered that the latitude given to the East India Company by the general clause in the bill was 'amply sufficient to secure whatever claim Mr. Dalrymple may have'. Dalrymple had prepared his argument in the printed *Case of Alexander Dalrymple, Esqr. 1784* (Catalogue A91).

⁸⁶ *Journal of the House of Commons*, 28 July 1784, p. 379. Dalrymple had approached Dundas to propose a clause of exception and to deliver a copy of his printed *Case* (Dalrymple to Dundas, 23 July 1784 (Canberra, National Library of Australia [NLA]: Dalrymple Letters, MS.43/2-2a)). For the House of Lords, Dalrymple wrote to his kinsman the Earl of Morton with a draft clause of exception: 'Provided nothing herein contained shall be construed to extend to any Person employed by The Court of Directors in England on day of 1784 to publish Charts and Nautical Instructions for the use of the said Company's Ships.' (Dalrymple to Morton, 4 August 1784 (NLA: Dalrymple

Letters, MS.43/3)). Morton volunteered, in a note to Lord Sydney, to present Dalrymple's petition, remarking that 'His case is a hard one.' (NLA: Dalrymple Letters, MS.43/3a). For a brief reference, see *Journal of the House of Lords*, 4 August 1784, pp. 145-146; for the original of Dalrymple's petition see London, House of Lords Record Office [HLRO]: House of Lords Papers, 4 August 1784, ff. 8357-8358. See also *Memorial of Alexander Dalrymple 1791*, pp. 22-24.

⁸⁷ Russell had been appointed Chief of Vizagapatam in 1781.

⁸⁸ C. H. Phillips, *The East India Company 1784-1834* (Manchester, 1940), p. 67.

⁸⁹ Dalrymple to Court of Directors, 15 April 1790, copy enclosed in Dalrymple to William Grenville, 16 April 1790 (PRO: CO.42/72, ff. 264-266). Dalrymple had laid his claim in September 1784, when the succession to Macartney was under consideration by the Court of Directors: 'Letter from Mr. Alexander Dalrymple dated the 11th instant, requesting that if the Court thinking his Services in England of essential consequence to the Company, should be induced to pass him over, and nominate in succession to the Government of Fort St. George, any person junior to him, they will establish him permanently in England for life; and at the same time signifying his readiness to return to his Station in India, being read, ...' (East India Company, Court Minutes, 15 September 1784 (IOR: B/100, p. 358)). On that occasion the Court deferred consideration of the governorship to 6 October, when Hollond was named without further discussion of Dalrymple being recorded. Some months earlier Dalrymple had tested the Court's reaction by applying to be appointed commander of the *Sir Edward Hughes* Indiaman (East India Company, Court Minutes, 5 August 1789 (IOR: B/109, p. 493)), only to have the request ordered to lie on the table without further consideration.

⁹⁰ Dalrymple presented his memorial for a pension on 9 March 1791, the Court referring it to the Committee of Correspondence on 11 March (East India Company, Court Minutes, 11 March 1791 (IOR: B/112, p. 964); East India Company, Miscellaneous Letters Received, 1791 (IOR: E/1/86, p. 234)). Dalrymple's cover letter only is present: the text is available in *Memorial of Alexander Dalrymple 1791* (Catalogue A177).

⁹¹ East India Company, Court Minutes, 13 April 1791 (IOR: B/112, p. 1088): 'Resolved that in consideration of the long and faithful Service of Mr. Alexander Dalrymple, an Annuity of £500 be granted him by the Company for and during the term of his natural life.' For the deliberations on Dalrymple's *Memorial* in the Committee of Correspondence, see East India Company, Committee of Correspondence, Minutes, 13 April 1791 (IOR: D/2), and Reports, 1791 (IOR: D/33, p. 413). Dalrymple made one further half-hearted move to be considered for the Madras governorship, in a letter to Dundas of 2 November 1792 (NLA: Dalrymple Letters, MS.43/12), where he was motivated by a desire for a change of climate to relieve his erysipelas.

⁹² See below, chapter 4, pp. 104-105.

⁹³ See note 91 above.

⁹⁴ Office note, 22 February 1797, endorsed on Dalrymple's account of disbursements, 20 February 1797 (Board of Admiralty, Hydrographer's Correspondence (PRO: ADM.1/3522)); see below chapter 5, p. 161.

⁹⁵ Fry, *Alexander Dalrymple*, pp. xxv-xxvi, attempted to claim that Dalrymple was enamoured of Sophia Pigot in Madras in 1776, and that he lost the opportunity of marriage by taking the news of Pigot's arrest to Europe. To assert this, Fry discounted the *Dictionary of National Biography* date of 14 March 1776 for Sophia's marriage to Edward Monckton, and claimed that a reference in Sophia's journal in October 1776 implied that she was unmarried: 'I begin now to wish earnestly for news from Dalrymple, this springs from no motive of either generosity or friendship, but interest; however that interest was not originally my own, I have made it so by my filial affection.' Sophia did indeed marry Edward Monckton on 14 March 1776 (East India Company, Madras Ecclesiastical Returns (IOR: N/2/1, f. 759)), and their son Edward was born in October 1777. Fry misunderstands 'filial affection': it was Sophia's affection for her father which caused her to be interested in the success of Dalrymple's mission to Europe to secure her father's release from detention. Dalrymple's subsequent dedication to Sophia of the manuscript play 'Incognita, or Love and Duty Reconciled' and of *Extracts from Juvenilia or Poems by George Wither* 1785 (Catalogue A98) has not been shown to be other than conventionally platonic (Fry, *Alexander Dalrymple*, p. xxvi), particularly as the items in question came to Sophia only after Dalrymple's death, as a bequest in his will (PRO: PROB.10/3854, paragraph 3). Apart from Dalrymple's enigmatic admission in 1768 ('I will go farther, and acknowledge that there is a lady with whom I should be happy to go hand in hand through life, ...' (*An Account of what has passed between the India Directors and Alexander Dalrymple*, first edition 1768, pp. 29-30, and second edition 1768/1769, pp. 35-36)), no other romantic connection is known or suggested until Dalrymple's relationship with Mary Selby in 1805 (see note 137 below).

⁹⁶ *Journal of Ship London ... along the North Coast of Magindanao* 1781, first edition, p. 17; Will of Alexander Dalrymple, 24 December 1798 (PRO: PROB.10/3854), para. 26.

⁹⁷ Will of Alexander Dalrymple, 24 December 1798 (PRO: PROB.10/3854), para. 27.

⁹⁸ In the absence of surviving letters to date the removal more precisely, the publication *Remarks on the Bloachee, Brodia and Arabian Coasts* 1781 is the earliest (16 April 1781) to show the Titchfield Street address.

⁹⁹ In the absence of convenient correspondence, the publication *An exact and true Description of the Coasts, Ports, Islands and Shoals ... of Luzon* 1789 is the earliest (12 September 1789) to show a High Street, Marylebone, address. Dalrymple dated letters and publications at various times from 52, 62 and 57 High Street, Marylebone. It is not yet clear how far this represents changes in house-numbering, and how far Dalrymple moved among neighbouring premises.

¹⁰⁰ Dalrymple to Duke of Portland, 28 June 1802 (NLA: Dalrymple Letters, MS.43/19), copy enclosed in Dalrymple to Dundas, 26 July 1802 (NLA: Dalrymple Letters, MS.43/20): 'It would be a very great inconvenience to me if Your Grace did not renew [the lease of] that part which adjoins to the Library I have built on part of the premises in Woodward's Court as these Premises have, at present, the inestimable advantage of being insulated and unconnected with other Buildings, which is a great Security against Fire, extremely dangerous to Books

and Papers of so much consequence as my Collection contains.'

¹⁰¹ Lady Christian Dalrymple died on 30 June 1770 (*The Scots Peerage*, s.n. Dalrymple, Earl of Stair). Newhailes was in the hands of Sir David Dalrymple, with his second wife Helen, his daughter Christian by his first marriage, and his unmarried sisters Janet and Rachel. Christian later recorded for 1782: 'In September went a jaunt to England; for the first time saw my uncle Sandy.' (Christian Dalrymple, *Private Annals of My Own Time* (Oxenfoord Castle, privately printed, 1914), p. 7).

Christian was aged 17 in 1782: she presumably had been too young to remember her uncle's visit of 1768, but the firmness of her statement suggests that Dalrymple may not have returned to Newhailes between then and 1782.

¹⁰² Now in the National Library of Scotland: Nha.A131; Nha.M10; Nha.M90; Nha.M110-112. The Newhailes Library set of Dalrymple's charts, plans and views, compiled in 1786 in twenty volumes, is in the National Library of Scotland Map Room.

¹⁰³ Alexander to Rachel Dalrymple, 20 January and 3 February 1794 (Newhailes Papers (NLS: MS. 25286, ff. 31-33)). Dalrymple reports a visit he had made to his sister-in-law, Sir David's widow Helen, and to his niece Jean, at Dulwich.

¹⁰⁴ Christian Dalrymple, the heiress of Newhailes, recorded in 1805 (*Private Annals of My Own Time*, p. 19) that she had not seen her uncle for 11 years, but omitted to state whether the 1794 encounter was at Newhailes or in England. In 1792 Alexander wrote to Christian that 'I have been very little at New Hailes since my infancy' (Alexander to Christian Dalrymple, 29 December 1792 (Newhailes Papers (NLS: MS. 25457, ff. 3-4))). Christian was later to keep among her papers a proof of the *European Magazine* article engraved portrait, marking it 'My Uncle Alexander' (Newhailes Papers (NLS: MS. 25286, f. 51)).

¹⁰⁵ For example, on a proposed edition of her father's published works: Alexander to Christian Dalrymple, 10 December 1802 (Newhailes Papers (NLS: MS. 25457, ff. 30-32)).

¹⁰⁶ He entertained his brother David to a Royal Society Club dinner on 12 August 1790, and a 'Capt. Dalrymple' (possibly his nephew John Pringle Dalrymple) on three occasions in 1798 and 1799 (RS: Royal Society Club, Dinner Books, softbound 2 (1790-1791) and 9 (1798-1799)). John Pringle Dalrymple, who succeeded to the baronetcy only in 1800, was an army officer.

¹⁰⁷ Both figure prominently as the recipients of specific objects in Dalrymple's will (PRO: PROB.10/3854, paras. 3-5; and see note 95 above). Dalrymple is known to have visited Leonora and Claud Russell at their home at Binfield Manor, Bracknell (Dalrymple to Marsden, 17 June 1798, written from Binfield Manor (PRO: ADM.1/3522)). He was intending to call on Matthew Boulton in Birmingham on his way from Cheltenham to visit Sophia and Edward Monckton at Somerford Hall, Staffordshire in 1797 when prevented by a 'fit of the erysipelas' (Dalrymple to Boulton, 6 October 1797 (BRL: Matthew Boulton Papers, Letter D25)).

¹⁰⁸ The Monckton marriage took place on 14 March 1776 and the Russell marriage on 17 October 1777 (East India Company, Madras Ecclesiastical Returns (IOR: N/2/1, ff. 759 and 791)). See note 95 above.

¹⁰⁹ The links between Banks and Dalrymple were closer than many of Banks' formal associations with scientists. Banks supported Dalrymple's case in a number of controversies where he might have been expected to show an olympian detachment. Two such cases were the advocacy of Arnold's chronometers over Earnshaw's (see *Some Notes Useful to those who have Chronometers at Sea* [1780], and R. T. Gould, *The Marine Chronometer: Its History and Development* (London, 1922), pp. 123-124), and over the choice of a map of the north Pacific Ocean to illustrate the publication of Cook's third voyage (see Helen Wallis, 'Publication of Cook's Journals: Some new sources and assessments', *Pacific Studies* 1 (1978), pp. 163-194, particularly pp. 180-182).

¹¹⁰ His election took place on 31 July 1777 (RS: Royal Society Club, Dinner Book 6). He had been a frequent guest since 1772, often as frequent as the dining rules allowed, until his departure for India in 1775. His next dinner as guest was 24 April 1777, no more than two or three days after his return.

¹¹¹ Though he was not a significant contributor to the meetings of the Royal Society, Dalrymple achieved an attendance rate of over 70% at the weekly Club dinners which preceded those meetings, higher if one discounts those weeks when he was not in London. When Dalrymple and Banks were both present, then, except when eminent guests were present to take the places of honour, Banks usually preferred to have Dalrymple sit at his left or right. Otherwise Dalrymple usually gravitated to the further end of the table, to sit at Marsden's right. This impression is capable of quantification from the sequence of Royal Society Club Dinner Books held in the Royal Society archives.

¹¹² Dalrymple's own guests at the dinners included (some before their own election): Captain King, Mr. Webber, Mr. Linné, William Marsden, Major Rennell, Matthew Boulton, Mr. Michell, Philip Stephens, William Bligh, Archibald Blair, Thomas Fitzhugh, M. de Rossel, Mr. Niebuhr, Michael Symes, Joseph Huddart, Lord Valentia, John Goldingham, Francis Beaufort, and John Barrow (RS: Royal Society Club, Dinner Books).

¹¹³ Dalrymple made it a condition in his will that Banks, Marsden, Rennell and Orme were to have the use of his books, maps and charts bequeathed to the Admiralty or to the East India Company (PRO: PROB.10/3854, para. 30).

¹¹⁴ The only monetary provisions he felt called upon to make in his will were to Pedro Manuel and Edward Bailly, to his coachman at Cheltenham, and to continue the provision he was making privately for the support of the widow of Benjamin Henry, his engraver (see chapter 2, n. 73), and of the mother of John McCluer, a contributor of plans and surveys (see chapter 4) (PRO: PROB.10/3854, paras. 26-27 and 43).

¹¹⁵ 'Mr. Dalrymple, finding a return of that Eruption, which confined him to the House for three months, and rendered him incapable of any business for some time; is affraid is it encreases that he shall be obliged to go to a warmer Climate, as that Complaint proceeds from want of perspiration.' (Dalrymple to Dundas, 2 November 1792 (NLA: Dalrymple Letters, MS.43/12)). 'Having had such frequent, and so severe attacks of the Erysipelas, I propose going to Cheltenham as soon as I can make the journey.' (Dalrymple to Earl St. Vincent, 9 September [1803] (PRO: ADM.1/3522); this letter is dated to 1803 by Earl St. Vincent's period as First Lord of the Admiralty from 1801 to 1803, and

by the Royal Society Club Dinner Books, which record Dalrymple's annual absence beginning after 9 September only in 1803). 'They say when things are at the worst they must mend - I hope this will hold good of the Erysipelas which I have very bad.' (Dalrymple to [Marsden], 29 February 1804 (PRO: ADM.1/3522)).

¹¹⁶ 'When I returned from India I was very subject to Bile; and when I was first appointed to the Office of Hydrographer to the Admiralty, I was at Cheltenham for that complaint, and was under the necessity to go there annually for some years after: but for the last two or three years I have not found it necessary to go to Cheltenham, Drinking that Water in London, occasionally, being sufficient.' (*Case of Alexander Dalrymple* 1808, p. 7). 'I ... will be at the Admiralty on Tuesday but as I wish to take Cheltenham Water I shall not be there before 2 o'clock unless you send notice by Mr. Walker that I should be with you earlier when I will omit Cheltenham Water.' (Dalrymple to Marsden, 17 June 1798 (PRO: ADM.1/3522)). Dalrymple supplied Nepean with a hamper of Cheltenham Water on at least one occasion (Dalrymple to Nepean, 3 August 1798 (PRO: ADM.1/3522)).

¹¹⁷ Dalrymple to Matthew Boulton, 6 October 1797 (BRL: Matthew Boulton Papers, Letter D25): '... when we last met You mentiond that your warm Bath was heated by Steam. I enclose a Sketch of my Bath-Room & the Place under the end of it where my Copper is to be fixed; It was my intention to have pumpt up the hot water to heat the Bath but I suppose the Steam may be carried up with equal facility: You will oblige me very much with your advice; as I am obliged to go into the Warm Bath thrice a week it is a serious consideration to warm it readily and as I have a command of Water I may have a succession.' The sketch survives as an enclosure to the letter. 'When I get to Town tomorrow I go into the Bath ...' (Dalrymple to Marsden, 17 June 1798 (PRO: ADM.1/3522)).

¹¹⁸ Dalrymple announced his annual departure to correspondents: 'As I shall leave Town for Cheltenham soon ...' (Dalrymple to Boulton, 17 July 1798 (BRL: Matthew Boulton Papers, Letter D28); and see note 115 above). Dalrymple wrote to Boulton from Cheltenham on 22 August 1801 to discuss the failure of water in the Royal Spa (BRL: Matthew Boulton Papers, Letter D30). Dalrymple's absence from the Royal Society Club weekly dinners for a continuous period in the late summer and early autumn is indicative of a Cheltenham visit. In 1795 he was absent for only three weeks in August, but confirmed (*Case of Alexander Dalrymple* 1808, p. 7; and see note 116 above) that he had been at Cheltenham when appointed to the Hydrographical Office.

¹¹⁹ Besides a hot water system (see note 117 above), Dalrymple proposed a system of metal window frames, with a diagram (Dalrymple to Matthew Boulton, 6 October 1797 (BRL: Matthew Boulton Papers, Letter D25)). In 1803 he asked to receive his Admiralty remuneration in future without deduction, expecting that the back payments 'would enable me to effect some Repairs, that are much wanted, to my House' (Dalrymple to Earl St. Vincent, 9 September [1803] (PRO: ADM.1/3522)).

¹²⁰ See note 56 above.

¹²¹ King and Lochee, *A Catalogue of the extensive and valuable Library of Alexander Dalrymple, Esq., F.R.S.*, 4 vols. (London, 1809-1810).

¹²² By the terms of Dalrymple's will (PRO: PROB.10/3854, para. 28).

Faden valued the collection at £1007.5s. on 14 August 1809 (PRO: ADM.1/3523).

¹²³ Also by the terms of Dalrymple's will (PRO: PROB.10/3854, para. 7). Marsden's library (including his acquisitions from Dalrymple) went to King's College London, and part has subsequently been deposited on loan with the School of Oriental and African Studies in the University of London.

¹²⁴ See the correspondence between Dalrymple and Herbert from 1779 to 1786 in John Nichols, *Illustrations of the Literary History of the Eighteenth Century*, 8 vols. (London 1817-1858), vol. iv, pp. 545-550.

¹²⁵ *Extracts from Juvenilia or Poems by George Wither* 1785 (Catalogue A98).

¹²⁶ Will of Alexander Dalrymple, 24 December 1798 (PRO: PROB.10/3854, para. 35).

¹²⁷ See chapter 4, p. 104 below.

¹²⁸ Copy accounts and stock lists of Dalrymple's publications from 1775 to 1794 in the Miscellaneous Papers of John Nourse (Royal Astronomical Society: Add. MS. 5, ff.13-15).

¹²⁹ Before re-issuing his 1772 *A Collection of Charts and Memoirs* in 1786 (Catalogue A103 and A106-A111), Dalrymple solicited a subscription from the East India Company for fifty copies (East India Company, Court Minutes, 3 August 1785 (IOR: B/101, p. 282)).

¹³⁰ See chapter 9 below.

¹³¹ *Practical Navigation* [1790] (Catalogue A175). Dalrymple compiled three chapters of this treatise, but it remained incomplete for the rest of his life, though he used parts of it in *Essay on Nautical Surveying* 1771, fourth edition 1806 (Catalogue A232).

¹³² *Plan for Promoting the Fur-Trade* 1789, and *Memoir of a Map of the Lands around the North-Pole* 1789 (Catalogue A160 and A164); see also chapter 4, pp. 134-135 below.

¹³³ The Melville Papers were distributed at a series of sales (see Holden Furber, *Henry Dundas, First Viscount Melville, 1741-1811* (Oxford, 1931), pp. 314-317), and groups of Dalrymple's letters to Dundas are now found in the National Library of Scotland, Scottish Record Office, and National Library of Australia. Dalrymple's idea for forming coastal militia from Chelsea Pensioners to man mobile gun platforms he first sent to Addington in 1803 when Dundas was out of office, but supplied copies to Dundas on his return (Dalrymple to Melville, 14 May 1804, enclosing copies of Dalrymple to Addington, 25 July and 16 August (Melville Papers (SRO: GD.51/2/1063/1-2))). Dalrymple's complaint to Melville about the unfairness of levying income tax on gross receipts, without making allowance for earlier expenditures, came to rest in the Chatham Papers (Dalrymple to Melville, 9 March 1805 (PRO: PRO.30/8/128, ff. 58-60)).

¹³⁴ The areas of immediate concern to the Admiralty were the English Channel, the French coast, and the North Sea, while Dalrymple's recent experience had been with the Andaman Islands and the Eastern Archipelago. For Dalrymple's management of Hydrographical Office staff, see chapters 5 and 7 below.

¹³⁵ 'I have been in the habit of doing much of my Business by night, and am often occupied in the concerns of the Hydrographical Office at home: amongst other Things in examining the Proofs of my Nautical Memoirs & Journals of which I have permitted The Admiralty to reprint 100 copies ...' (Dalrymple to Pole, 23 December 1807 (PRO: ADM.1/3522)). For Dalrymple's republication of nautical memoirs in 1806 and 1807, see chapter 5, pp. 174-176, and for his use of engravers and printers generally, see chapter 7.

¹³⁶ Will of Alexander Dalrymple, 24 December 1798, para. 26, alteration of 29 October 1805 (PRO: PROB.10/3854): 'Pedro Manuel being admitted into the Marybone [blank in original] This Bequest becomes needless, but I leave him two shillings weekly for his accommodation.'

¹³⁷ Will of Alexander Dalrymple, 24 December 1798, 2nd codicil, 26 October 1805 (PRO: PROB.10/3854): '2d Codicil, 26th October 1805, Cheltenham - as Man's Life is uncertain In case I should not live to conclude my Engagements with my Dear Friend Mary Selby I leave Her & My Nephew Sir John Pringle Dalrymple jointly my Residuary Legatees and recommend her to Sir John's kind attention & protection. I have given into Her Hands a Duplicate of this Codicil.' A stray leaf of paper watermarked 1832, and since associated with the name of Sophia Monckton (possibly as author), has survived in the Laing Collection in Edinburgh University Library. The paper refers to Dalrymple's dedication of a book (almost certainly *Extracts from Juvenilia or Poems by George Wither* 1785 (Catalogue A98), the only book he is known to have dedicated to a lady), and reads: 'Dalrymple was enamoured of a Miss Selby of Cheltenham who lived with him in 1805, but as she was at that time only 17 years of age the dedication does not apply to her. Dalrymple was never married.' (Laing Manuscripts (Edinburgh University Library: La.II.589/4)).

¹³⁸ In *Private Annals of My Own Time* Christian wrote (p. 19): 'March, I went to London for ten days with Colonel Pringle to see my uncle, whom I had not seen for eleven years.' The visit is described in Christian's manuscript Journal, 1801-1808 (Newhailes Papers (NLS: MS. 25460)): Christian visited her uncle on 30 March (f. 94), on 4 April 'Picked up my uncle & went with him to dine with Lady Morton' (f. 94v), and the next day 'Went to Town, spent an hour with my Uncle, saw his Library, had some embarrassing conversation with him, came out by two' (f. 95). The nature of the 'embarrassing conversation' between a 67-year-old bachelor uncle and his 39-year-old spinster niece is not recorded.

¹³⁹ Holden Furber, *Henry Dundas, First Viscount Melville*, pp. 148-165.

¹⁴⁰ Stephens had been Secretary to the Admiralty from 1763 to 1795, and a member of the Board of Admiralty from 1795 to 1806 (J. C. Sainty, *Office-Holders in Modern Britain, IV: Admiralty Officials, 1660-1870* (London, 1975), p. 36). For Stephens, see also Sir Lewis Namier and John Brooke, *The House of Commons, 1754-1790*, 3 vols. (London, 1964), vol. iii, p. 475, and R. G. Thorne, *The House of Commons, 1790-1820*, 5 vols. (London, 1986), vol. v, pp. 265-266.

¹⁴¹ Sainty, *Admiralty Officials*, p. 26.

¹⁴² Sainty, *Admiralty Officials*, p. 11; [William Marsden,] *A Brief Memoir of the Life and Writings of the late William Marsden ... written by himself* (London, 1838), pp. 104-132.

¹⁴³ *A Brief Memoir ... of William Marsden*, pp. 129-132.

¹⁴⁴ The collection of commercially published charts which Dalrymple assembled during 1807 at the request of the Admiralty Board in Marsden's tenure was turned by Pole into an exercise of chart assessment and evaluation, much against Dalrymple's wish (see his reply to Pole of 24 November 1807 (PRO: ADM.1/3522)).

¹⁴⁵ When pressed repeatedly to select charts and plans from current commercial publications for fleet use, Dalrymple demurred 'that I am not competent to make a Selection of Charts as recommended, having no experience in the Navigation of the European or American Seas.' (Dalrymple to William Wellesley Pole, 24 November 1807 (PRO: ADM.1/3522); and see chapter 5, pp. 178-179 below). John Barrow, who was Second Secretary in Dalrymple's last years, in his biographical account of Dalrymple in *Sketches of the Royal Society and Royal Society Club* (London, 1849), pp. 134-139, characterised the relationship thus: 'Mr. Secretary Wellesley Pole, who was perhaps not particularly gifted with the *suaviter in modo*, used frequently to complain of his [Dalrymple's] perverse temper.' But it was Barrow's hasty and peremptory minute of 1 April 1791 which drew Dalrymple's sharpest retort (see chapter 5, p. 181, n. 193 below).

¹⁴⁶ *Notes on Two Letters to Brother Abraham, concerning the Roman Catholics* 1807, p. 2: "'The wooden image of Lord M'" I doubt not you thought this a Lucky-Hit. - To be sure the First Lord of the Admiralty is not a Naval Officer; but He has not been long enough in office to enable any one to determine that he is, unfit for It.'

¹⁴⁷ For the operation of the Chart Committee, see chapter 5 below. It is significant for the deteriorating inter-personal relationship between Dalrymple and Pole that Pole had the order appointing the committee of naval officers approved within three days of Dalrymple's demur over selecting charts, and that the committee was functioning within a further few days (Popham and Hurd to Pole, 4 December 1807 (PRO: ADM.1/3522)).

¹⁴⁸ Draft of letter dismissing Dalrymple, and collection of supporting documents, listed in schedule of 2 July 1808 (PRO: ADM.1/3523). The collection is completed by the copies Dalrymple made for Melville of the letters he received from Pole (Dalrymple to Melville, 30 May 1808 (SRO: GD.51/2/399/2)).

CHAPTER 2

'SOME THOUGHTS OF PUBLISHING':*

THE FIRST PUBLICATION OF CHARTS AND MEMOIRS 1769-1772

Between October 1769 and the end of 1771 Dalrymple published six charts and six memoirs, chiefly from observations in his voyages in the early 1760s in the China Sea and on the coasts of China, Indo-China, Borneo and the Philippines.¹ He proposed in February 1769 to publish a subscription series of eighteen charts in support of his advocacy of an East India Company entrepôt settlement at Balambangan, north of Borneo. The premature termination of the series in 1772 with its publication as *A Collection of Charts and Memoirs*,² reflected less its internal coherence than the end of Dalrymple's hopes of leading an expedition to Balambangan.

Dalrymple first intimated to the Company in March 1766 that he had it in view to compile charts from his own observations,³ and he was later permitted, with Vansittart, to 'inspect the several Maps and Charts of the East Indies in the Company's possession'.⁴ In February 1767 he was contemplating 'a more correct delineation of Borneo', though lacking materials for part of the coast.⁵ As early as April 1762 he was claiming to Vansittart that he had improved on the China Sea chart in D'Après de Manneville's *Le Neptune Oriental*:

I have also sent you a Chart to be joined to the first Sheet of M. D'Après of the China Seas as you will perceive by Condor & the Lines, in which I have laid down our Track with a Sketch of the Coast of Borneo which is extremely ill described in the French.⁶

Dalrymple set out his scheme first in a letter to D'Après de Manneville in December 1768:

I have Some thoughts of publishing a Set of Charts of Borneo & the Philipinas from my own observations & the Collections I have made; I have already made considerable progress in the delineation of the

Northern part of Borneo & the Philipinas. That of Borneo only requires the last examination & an explanatory Memoir, but as this part is almost entirely from my own observations I am cautious of giving it to the World till I am convinced it is as near correct as I can make it.⁷

He refined it in February 1769 as an advertisement in *A Plan for Extending the Commerce of this Kingdom, and of the East-India-Company*,⁸ which gave topographical descriptions of Balambangan and the neighbouring trading areas centred on the cession which Dalrymple had obtained in 1762 for an East India Company settlement.⁹ The crude small-scale frontispiece map of East Asia¹⁰ illustrated only the broad argument for China Sea trade: the proposed eighteen charts, to be accompanied by explanatory text, were to map the places and tribal names in the *Plan*. Had they all been constructed, and to the quality of the first, they would have formed a comprehensive atlas of the Borneo-Sulu-Palawan trading area. Besides a general chart of Borneo, Sulu and adjacent islands at 1 inch to 1 degree, and four at 20 nautical miles to the inch for the coasts of Borneo, there was to be a group of six at 10 miles to the inch for northern Borneo, the Sulu Archipelago, Palawan and the Sulu Sea, and larger scale plans for north-east Borneo, Marudu Bay, Balambangan, Sulu and the Pilas islands.¹¹ The *Plan* was tendentious and contained much which the Company preferred to treat as confidential. Its projected publication had been the focus of Dalrymple's differences of 1768 with the Court of Directors.¹² The Court discouraged him in December 1769 from publishing the *Plan* as 'greatly prejudicial to the particular interests of this Company and to his Country in general'.¹³ Though a few copies circulated, the public impact of the text, and therefore of the advertisement inviting subscription to the charts, was none. Only after formal dismissal from the Balambangan expedition in March 1771 did Dalrymple eventually publish the *Plan*, with a modified introduction and a replacement advertisement underlining the missed opportunity.¹⁴

Dalrymple envisaged £200 as the minimum cost of the publication of his charts and views. This figure compared favourably with the outlay of £11.19s. on the complex chart of the South Atlantic Ocean begun in 1768.¹⁵ He intended inviting subscriptions, claiming the expence of engraving the Balambangan charts was 'too considerable for [him] to undertake', but after his windfall award of £5000 by the East India Company on 28 June 1769,¹⁶ he began to have charts engraved on his own account. The first two, of northern Borneo and the Sulu Archipelago at 20 nautical miles to the inch, and of the west coast of Palawan at 10 miles to the inch,¹⁷ follow the 1769 proposal in area, scale and type of information shown. The chart for Borneo, as first engraved in October 1769, lacked soundings for offshore water depths, an omission unusual in a navigation chart but in keeping with the stated purpose of illustrating the topographical description in the *Plan*. The advertisement in the first volume of *An Historical Collection of the Voyages and Discoveries in the South Pacific Ocean*¹⁸ continued this distinction, describing Palawan as a 'chart' but Borneo and Sulu as a 'map'.

The chart of Felicia (or north-east Borneo) at 10 miles to the inch,¹⁹ appearing in November 1770, showed departures from the 1769 scheme. Extending from Marudu Bay to Cape Unsang it covered part of the area of two of the proposed charts, and included as an inset the plan of Balambangan originally intended to form a separate third chart. Soundings were present from the first. Changes were occurring, and other pressures encroaching on Dalrymple's time. Besides the Balambangan project he had four other publication projects under way in 1769 and 1770: a parallel series of charts of his voyages in the Philippines, the chart of the South Atlantic Ocean, the historical collection of South Pacific voyages, and a similar collection of voyages to the South Atlantic. Progress on these was complicated by other

geographical enquiries, particularly in correspondence with D'Après de Mannevillette, and by Dalrymple's pursuit of his own career in the East India Company.

In April 1768 Dalrymple had told D'Après of his 'Intention of publishing a Collection of Voyages into the So. Sea',²⁰ but it was 'a proof Impression of a Chart of the Ethiopick Ocean with the Tracks of Dr. Halley & M. Losier Bouvet' which he sent first to D'Après in October 1768.²¹ In December came the idea of the set of charts of Borneo and the Philippines.²² D'Après returned the South Atlantic Ocean chart in January 1769, at which point Dalrymple planned to have the plate corrected and to issue 'an explanatory Memoir' with plans of Tristan da Cunha, Ascension, Fernando Noronha and Trinidad.²³ In the same letter Dalrymple was soliciting from D'Après charts and plans of the Philippines, and discussing the locations of shoals and dangers in the China Sea.²⁴ The February 1769 note in the then unpublished *Plan* announced that work on the volume of Spanish voyages to the South Pacific had been delayed to await more material from Spain.²⁵ The representation of the north point of Borneo in Dalrymple's 8 March letter to D'Après was a copy of the inset from the East Asia sketch map in the *Plan*.²⁶ On 17 May Dalrymple sent a copy of the South Atlantic Ocean chart finished with D'Après' corrections, and promised the May 1769 *Memoir* 'as soon as printed'.²⁷ He was still pursuing information on the Philippines on 11 July,²⁸ and had had a copy of Faveau's 1753 chart of Palawan in his hands for most of the year.²⁹ The preliminary issues of *South Pacific Ocean* appeared in or shortly after October.³⁰ *Memoir of a Chart of the Southern Ocean* had included, earlier in the year, Dalrymple's proposal to publish separately the voyages of Halley, Bouvet and La Roche;³¹ the first formal advertisement for these appeared in the definitive edition of *South Pacific Ocean* in 1770 as 'A

collection of Voyages and observations in the Ocean between South America and Africa' to be published 'shortly'.³²

Dalrymple's letter to D'Après of 27 February 1770 shows the scheme of chart publication changing: drawn by D'Après to consider his proposed publications of Borneo and the Philippines, he remarked:

... I am engaged in this rather with a View to communicate my own observations & explain my own Voyages in the Eastern Seas than as a Collection of Charts for the Navigation of those Seas. ... I have not only many observations of my own amongst the Philipinas, but many Plans & Memoirs which I have collected.³³

In the same letter he announced the imminent publication of the Palawan chart, four months after its nominal imprint date, and mentioned for the first time two charts outside the Balambangan scheme. One was 'a Chart of the Islands which lye on the Coast of China to the Eastward of Macao, this is chiefly from my own observations';³⁴ the other a small-scale chart of the China Sea:

I am also engaged in making a General Chart of the China Seas from the Equator on a Scale of one Inch to 1°. I have finished the part of Borneo which comes into it, with the greater part of Palawan or Paragua & all the Shoals and Islands of which I have any certain account. I shall transmit a copy of this to you shortly: I cannot finish it till my Chart of the Coast of China is compleated as well as that of Cochin China.³⁵

Only in April 1770 did Dalrymple send D'Après a copy of the 1769 Borneo chart, at the same time deferring sending the Palawan chart until he had printed his journal to accompany it.³⁶ He had presented a copy of the Borneo chart to the East India Company on 8 March.³⁷ His appointment on 5 September 1770 to command the Balambangan expedition was expected to mean an absence of three years from England.

Announcing this to D'Après on 7 September, Dalrymple enclosed a proof of the China Sea chart, with his intention to take the engraver to Madras to complete *en route* that chart and 'all the Charts of my former Voyages'.³⁸ The China coast chart was in proof in turn by December,

with one unfinished copy to D'Après and six to the East India Company for the departing China ships.³⁹ A copy of the completed China coast chart went to D'Après on 29 January 1771.⁴⁰

The change in emphasis of Dalrymple's chart publishing, from a 'Balambangan atlas' to a series illustrative of his 1760s voyages, was thus accomplished significantly before his negotiations with the East India Company turned sour early in 1771.⁴¹ By the time of his dismissal on 21 March the new pattern was clear; the dismissal simply emphasised it:

The leisure which I shall now have, by the late resolution of the Court of Directors, will afford me an opportunity of putting in order the many Nautical Observations I made during my long peregrinations in the unfrequented parts of the Indian Seas.⁴²

The China Sea chart was the 'cross-over' chart, a modification of the general chart of Borneo intended in 1769: the scale remained 1 inch to 1 degree, but the area shifted north and west to exclude southern Borneo and to bring in the China and Indo-China coasts instead. Before his dismissal Dalrymple had had engraved an southern extension piece, completing the Borneo outline, to be pasted to the lower margin of printed copies. An error in the latitudes caused this new engraving to be soon discarded,⁴³ and its purpose is not now clear. The chart continued to serve its first purpose 'to explain the situation of Balambangan, relative to the adjacent parts, and to point out, what Nautical examinations were most immediately necessary from thence',⁴⁴ but later alterations to the plate, particularly for shoals and rocks in the China Sea and to add ships' tracks, suggest that, with the China coast chart, it was used more as a general chart for the regular China route.

To concentrate on his charts and memoirs Dalrymple brought *South Pacific Ocean* to a slightly untidy close in the summer of 1771, the

second volume (the Dutch voyages) appearing in two fascicles,⁴⁵ and shelved the collection of South Atlantic voyages. A cross-advertisement, dated April, in the first fascicle of the second volume of *South Pacific Ocean* announced as 'lately published' the Borneo map, the China Sea chart with an explanatory memoir, the China coast chart with plates of views of land and a memoir, the Palawan chart now with a printed journal and a plate of views, and the Felicia chart.⁴⁶ Despite his dismissal Dalrymple presented the Court of Directors on 18 April with copies of the Felicia chart, the China coast chart (with memoir and views), and the Palawan journal and views to go with the chart previously supplied.⁴⁷ The new advertisement to replace the redundant 1769 scheme in *A Plan for Extending the Commerce of this Kingdom* was dated 6 May 1771, and cross-advertised the same items as *South Pacific Ocean* in April.⁴⁸ When sending six copies of the *Plan* to the East India Company on 25 May, prior to publication, Dalrymple offered the map, four charts, three memoirs and four plates of views at 2 guineas a set, the first suggestion that these miscellaneous works were considered as published together.⁴⁹ The same advertisement announced the China journal of the *Cuddalore*, with a plate of views, as imminent. Dalrymple expected, on grounds of expense, to engrave only one further chart, of the Sulu Archipelago at 5 nautical miles to the inch.⁵⁰

The letterpress memoirs produced in rapid succession in the first half of 1771⁵¹ were of two types, both purely functional. The texts to accompany the Palawan and China coast charts comprised extracts from one or more ships' journals giving observations and bearings as authority for the chart outlines. The China coast memoir also included a separate diagram of bearings for the complicated Canton River mouth section.⁵² The two extracts from the journals of the *Cuddalore* gave topographical notes in addition, though with only small-format charts. Plates of views of land seen from stations marked on the charts were

included in these 'journal-type' memoirs. The *Memoir of a Chart of the China Sea* resembled more the *Memoir of a Chart of the Southern Ocean* 1769 in method. Each of these charts was a compilation for which the memoir served to list the manuscript and printed sources, noting the extent to which each was used and its reliability. The *Essay on the Most Commodious Methods of Marine Surveying*, which also appeared in the first half of 1771, did not fit this general pattern. It was written in 1765 to summarise the methods Dalrymple had tried in running coastal surveys, particularly the use of Hadley's quadrants held horizontally to establish the reciprocal bearings of objects onshore.⁵³ It was also the only memoir advertised as available separately.⁵⁴

The six memoirs (the last being the Hainan journal of the Cuddalore, with views unfinished) were completed by the end of June 1771: Dalrymple listed them with the five charts in his 6 July 1771 letter to D'Après as having been sent previously.⁵⁵ Almost immediately he planned to move on to 'compleating the Charts of my own voyages thro' the Philipinas & other parts of the Eastern Islands'.⁵⁶

Dalrymple combined his publications into *A Collection of Charts and Memoirs* shortly after the appearance of the December 1771 Sulu chart, listing the six charts, six memoirs and associated plates in the *General Introduction*, dated 1772, of which he sent a copy to D'Après sometime before 13 March, together with the previously missing charts (presumably the Sulu chart and the views from the Hainan journal of the Cuddalore).⁵⁷ He confirmed the composition of the collection to D'Après again on 2 July, having meantime presented complete sets of charts and memoirs to the East India Company on 8 May and to William Herbert, the *doyen* of hydrographers in bibliographical retirement in Cheshunt, on 4 May.⁵⁸ The *General Introduction* listed the contents of the *Collection*, and provided notes giving authorities for the Felicia

and Sulu charts. Dalrymple considered further projects for which he considered he had sufficient material to publish, and the rest of the pages of the introduction was taken up with lists of Dalrymple's own collection of manuscript and printed charts (including the contents of his copy of Van Keulen).⁵⁹

In March 1772 Dalrymple had already embarked on a new exercise, 'a Chart of the Bay of Bengal from 16°. No. Lat: to 23°. N to be engraven, the scale is 3 inches to 1°.', this time at the expense of the East India Company.⁶⁰ It used as a basis the survey by Plaisted and Ritchie of the coast of Bengal provided to Dalrymple officially by the Company.⁶¹ An early form of the *Memoir*, detailing sources in the same way as for the South Atlantic and China Sea charts, was ready for the Court of Directors on 8 May,⁶² while a proof had gone to Herbert four days earlier.⁶³ In the published form of *Memoir of the Chart of the Bay of Bengal*, Dalrymple recounted the enthusiasm of John Purling, the new Chairman of the Court of Directors in April 1772, for the project.⁶⁴ He had originally intended simply to engrave the official survey, but obtained Purling's backing for a larger work of recompilation using other sources. At this point he was contemplating covering the northern part of the Bay of Bengal in two charts.⁶⁵ To depict seven degrees of latitude would have entailed using standard 25 x 19 inch plates in portrait-format charts, giving a maximum twelve degrees of longitude over two plates. Realisation that this would be insufficient to include both the mouth of the Krishna River and Cape Negrais at 16°N was a significant reason for revising the format:

I have altered the form it is on one plate & contains the Coasts from 19°. N near Ganjam, to 19° N on the Arrackan Coast: the Engraving is very far advanced & I expect to have it finished within the month.⁶⁶

though in the published *Memoir* he complained of the lack of reliable detail on both coasts between 16°N and 19°N. The chart as published in

September covers an area eight degrees in longitude between 19°N and 23°N.⁶⁷

The Bay of Bengal chart, the South Atlantic chart, and the six *Collection* charts form, with their memoirs, a coherent group produced over a period of four years. The charts share common plate and paper dimensions, resulting in a chart size of 18 x 24 inches within the neatline, sufficient for an area 6 degrees by 8 degrees on a plane-chart projection at 20 nautical miles to an inch. Dalrymple's charts, from the 1769 Balambangan series onwards, used this standard half-double-elephant size, generally at scales which were successive halvings or doublings of this standard scale. The letterpress memoirs, whether extracts of journals or discussions of sources, were produced as quarto pamphlets. His format models were the printed sources already familiar to him: William Herbert's *New Directory for the East Indies* was published with quarto letterpress separate from the charts⁶⁸ and D'Après de Manneville's *Memoire sur la Navigation de France aux Indes*, also in quarto, of which Dalrymple received copies in 1765.⁶⁹ In standardisation of chart paper size he followed both these authors, though D'Après proposed a different general size for *Neptune Oriental* in its second edition.⁷⁰

As an East India Company servant returned from India without previous experience in publishing, Dalrymple used jobbing engravers and printers in London, with some of whom he was to strike up lasting arrangements. Thomas Jefferys, the prolific engraver and geographer of the mid-eighteenth century, was recovering from his 1765 bankruptcy when Dalrymple had him engrave the South Atlantic Ocean and Borneo charts.⁷¹ William Whitchurch, of Bartholomew Lane and Islington, completed the writing engraving on the 1770-1772 charts, as well as engraving plans for Dalrymple and others in the mid-1770s.

Whitchurch revised Jefferys' work on the Borneo chart after Jefferys died in 1771, and one of his pupils, Matthew Smith, later engraved plans for Dalrymple.⁷² The graduation and outline engraving of the 1769-1772 charts was done by Benjamin Henry, not otherwise known as an engraver, but who collaborated with Dalrymple in experiments for representing hills and views on copper before he died some ten years later.⁷³

The forms in which Dalrymple issued his published charts differed widely, even in the 1769-1772 period. The first impressions were on translucent 'China paper', as Dalrymple called it.⁷⁴ One of the earliest examples of the October 1769 Borneo chart is on China paper extra-illustrating a copy of *South Pacific Ocean 1770-1771*.⁷⁵ The presentation copy to Sir Joseph Banks of *Collection of Charts and Memoirs* has the charts on China paper,⁷⁶ and Dalrymple reminded D'Après in 1772 that 'the Charts being on China paper are probably folded up in the Memoirs'.⁷⁷ The regular copies of the charts (as also the plates of views within the memoirs) were on a French soft laid paper: the bulk of this paper and its relatively low fold strength made it impracticable to fold six charts to quarto page size. The normal form of issue of the charts, particularly when South Atlantic Ocean and Bay of Bengal were included, was as a separate paper-bound oblong half-double-elephant atlas, the charts guarded and bound at their short left-edge or top.⁷⁸ The views of land and other small plates, whether on China or French paper, were folded and bound in with the memoirs.

The other publication of Dalrymple's 1769-1772 charts took place in France. D'Après de Manneville received, with the charts and memoirs, a wide-ranging permission from Dalrymple in August 1772:

You have my full consent to make what use you please of the Charts I have sent you: The Memoirs accompanying them shew where & what confidence they merit: You will undoubtedly find many mistakes which

escaped my observation; And therefore you will do me a favour in communicating your remarks to me.⁷⁹

Four of the charts consequently were re-engraved in France for issue in the 1775 edition of the *Neptune Oriental*, which also included translations of some of the memoirs.⁸⁰

The 1772 publication of *Collection of Charts and Memoirs* did not mean that revision of the plates stopped in England either. The South Atlantic Ocean plate is found with place-names and observations added in manuscript, and then added to the plate, with country names, early in the 1770s.⁸¹ The Borneo map had from its earliest appearance, an appliqué slip covering the Tawi-tawi islands with a more detailed representation. This alternative rendering was never added to the plate itself, and the appliqué slip exists in two editions.⁸² Later issues of the Borneo chart, even after the addition of soundings and extra names in 1775, lack any such amendment. The Bay of Bengal chart, as first issued, lacked a key to the 'no ground' symbol: some copies have a one-line printed slip affixed for this, before the plate was amended and reprinted.⁸³ Shortly after issue, however, the plate acquired an extensive slip correcting the Arakan coast with additional soundings.⁸⁴ In the letterpress, Dalrymple's judgement that one of his technical expositions was unclear entailed the cancellation of four pages in *Essay on Marine Surveying*: the substitution of a clearer text was made before issue in most copies, but to D'Après a loose sheet was sent instead.⁸⁵

The *Collection* was advertised in *Memoir of a Chart of the Bay of Bengal* in 1772, with the sets of charts and memoirs at one guinea each set. Individual charts, including the South Atlantic Ocean chart, were offered at prices from 4s. to 6s. each. The *Essay on Marine Surveying* was alone available separately, from Elmsly.⁸⁶

Thus, at the same time that Dalrymple was resiling from his 1769 scheme to produce charts of the waters of Borneo, on the grounds that he had not sufficient accurate information to publish anything other than his own observations, the accuracy of his charts attracted wider and lasting interest in a developing market. Chairman Purling's encouragement for the chart of the Bay of Bengal drew Dalrymple into charting waters he had never visited. Despite Dalrymple's initial dissatisfaction with this method of proceeding, his chart of the Bay of Bengal was re-issued by the Admiralty until the 1820s,⁸⁷ and four of his Borneo charts remained current until the 1850s and 1860s.⁸⁸ Even at this early stage, Dalrymple was producing charts of lasting general interest, though the uses to which they were put were often far removed from the purposes for which he had conceived them.

NOTES TO CHAPTER 2: 'SOME THOUGHTS OF PUBLISHING'

* 'I have Some thoughts of publishing a Set of Charts of Borneo & the Philipinas from my own observations & the Collections I have made; ...' (Dalrymple to D'Après de Manneville, 24 December 1768 (Paris, Archives Nationales [AN]: Marine 3JJ 340(3))).

¹ Catalogue B13 691020b Borneo, B14 691026 Cuddalore/Palawan, B15 701130 Felicia, B33 710121 China, B34 710419 China Sea, and B36 711210 Sooloo; *Memoir of a Chart of the China Sea* 1771, *Essay on the Most Commodious Methods of Marine Surveying* 1771, *Memoir of a Chart of Part of the Coast of China* 1771, *Journal of the Schooner Cuddalore on the Coast of China* 1771, *Journal of the Schooner Cuddalore on the Coast of Hainan* 1771, *Memoir of the Chart of the West Coast of Palawan* 1771 (Catalogue A13-A18).

² *A Collection of Charts and Memoirs* 1772 (Catalogue A21), including *General Introduction to the Charts and Memoirs* 1772 (Catalogue A22).

³ East India Company, Miscellaneous Letters Received, 1766: Dalrymple to Court of Directors, 31 March 1766 (London, India Office Records [IOR]: E/1/48, pp. 32-32a); East India Company, Court Minutes, 4 April 1766 (IOR: B/81, p. 401). For a group of manuscript charts by Dalrymple, surviving from his 1760s voyages and associated compilation work, see Admiralty Hydrographic Department, *A Summary of Selected Manuscript Documents of Historic Importance preserved in the Archives of the Department*, Professional Paper 13 (London, 1950), pp. 36-37.

⁴ East India Company, Court Minutes, 19 November 1766 (IOR: B/82, p. 275). For Dalrymple's assessment of the value of these charts, see: Dalrymple to Michell (Secretary, East India Company), 24 October 1768 (IOR: E/1/51, pp. 84-84d).

⁵ Dalrymple to D'Après, 12 February 1767 (AN: Marine 3JJ 340(3)).

⁶ Dalrymple to Vansittart, undated but marked as received 17 April 1762 (IOR: MSS. Eur. O.V.67(24), pp. 107-119, especially p. 117). By 'M. D'Après' Dalrymple meant J. B. N.-D. D'Après de Manneville, *Le Neptune Oriental ou routier general des côtes des Indes Orientales et de la Chine ...* (Paris, 1745).

⁷ Dalrymple to D'Après, 24 December 1768 (AN: Marine 3JJ 340(3)).

⁸ See Catalogue A5. The 13 February 1769 advertisement is present only in the first issue of the *Plan*, pp. 109-112.

⁹ For a useful summary of the circumstances of the 1762 cession, see Nicholas Tarling, *Sulu and Sabah: A study of British Policy towards the Philippines and North Borneo from the late eighteenth century* (Kuala Lumpur, 1978), chapter 1, especially p. 14.

¹⁰ Catalogue B10 690000c East Asia.

¹¹ *A Plan for Extending the Commerce of this Kingdom* 1769, first issue, pp. 109-110.

¹² Dalrymple related these differences in *An Account of What has Passed between the India Directors and Alexander Dalrymple* 1769, second edition. His letters of 5 and 11 October 1769 (East India Company, Miscellaneous Letters Received, 1769 (IOR: E/1/51, pp. 62-62a and 71-71c)), proposing to publish his 'Plan', resulted in the Court of Directors referring the matter to their Legal Adviser, whose opinion

was that 'however improper or indecent the publication of this Book may be thought, He is not by so doing guilty of a breach of any Covenant [as a Writer]' (East India Company, Legal Adviser's Papers (IOR: L/L/7/123)). See chapter 1, p. 21 and n. 52 above.

¹³ East India Company, Court Minutes, 13 December 1769 (IOR: B/85, p. 349).

¹⁴ *A Plan for Extending the Commerce of this Kingdom* 1769, second issue 1771. On 25 May 1771 Dalrymple wrote to the Court of Directors: 'I have not yet published my "Plan for extending the Commerce of this Kingdom & of the Company" and therefore send Six Copies in conformity to the request of the Committee' (IOR: E/1/55, p. 260a). Formal publication followed: the *Plan* appeared in sequence in the list of publications of which Dalrymple left the stock with John Nourse in 1775 (London, Royal Astronomical Society: Add. MS. 5.13). The uneven progress of negotiations between Dalrymple and the Company over the 1770-1771 Balambangan expedition is laid out in East India Company Court Minutes (IOR: B/85-86) and Miscellaneous Letters Received (IOR: E/1/54-55), indexed under 'Dalrymple'.

¹⁵ *Memoir of a Chart of the Southern Ocean* 1769, p. 8: 'I intend, by the publication of this chart, to form a fund for engraving others which may be useful; and therefore, after reimbursing what this plate has cost me, the produce will be laid out in that mode. I shall not reckon the expence of drawing in the account; as this expence was for my own use and satisfaction, and is not increased by communicating the chart to the public. The plate cost £1.15s.6d.; Engraving the graduation, &c. £2.16s.6d.; [Engraving] the chart £5.5s.0d.; Corrections and alterations in the chart £2.2s.0d.' The figure of £200 for the proposed Balambangan plates is in the advertisement in the first issue of the *Plan* in 1769.

¹⁶ East India Company, Court Minutes, 28 June 1769 (IOR: B/85, pp. 88-89). Dalrymple's application of 28 April (IOR: E/1/52, pp. 170-170a) had represented that he had lost ten years' salary at Madras 'generally reckoned worth £500 [per] annum', but the Court awarded £5000 'as a Gratuity ... in full Consideration for his past Services and of all Demands and Expectations'.

¹⁷ Engraved with publication dates in October 1769: Catalogue B13 691020b Borneo, and B14 691026 Cuddalore/Palawan.

¹⁸ Catalogue A11. The advertisement appears on the reverse of the half-title page of the third (1770) issue of volume I of *An Historical Collection of the several Voyages and Discoveries in the South Pacific Ocean*.

¹⁹ Catalogue B15 701130 Felicia.

²⁰ Dalrymple to D'Après, 29 April 1768 (AN: Marine 3JJ 340(3)).

²¹ The despatch of this proof copy of Catalogue B11 690400 South America was reported by Dalrymple in his 29 November 1768 letter to D'Après (AN: Marine 3JJ 340(3)).

²² See note 7 above.

²³ Dalrymple to D'Après, 31 January 1769 (AN: Marine 3JJ 340(4)). The 'explanatory Memoir' of this letter was the proposed larger collection concerning the South Atlantic, of which some part was

published (without the additional plans) in 1775 as *A Collection of Voyages chiefly in the South Atlantick Ocean* (Catalogue A45). The eight-page *Memoir of a Chart of the Southern Ocean* of May 1769 (Catalogue A6), which also promised these plans and a plan of St. Helena, was, besides its discussion of the sources for 690400 South America, no more than a prospectus for the larger work. Three of the plans were published in 1781 (Catalogue B216 810317b Tristan da Cunha, B218 Ascension I, and B219 810411 Fernando Noronha), though it appears from the imprint date '1771' first engraved on the Ascension chart that it may have been prepared much earlier.

²⁴ 'I shall think it a great favour if you will oblige me with a list of the Charts & particular plans you have of the Philipinas.' (Dalrymple to D'Après, 31 January 1769 (AN: Marine 3JJ 340(4))). For the sketch and list of shoals in the China Sea, enclosed with the 31 January 1769 letter, see AN: Marine 6JJ 63(149).

²⁵ *A Plan for Extending the Commerce of this Kingdom* 1769, first issue, p. 111.

²⁶ Dalrymple to D'Après, 8 March 1769 (AN: Marine 3JJ 340(4)): 'I have enclosed a plan of the No. Point of Borneo & the Islands to Palawan; in which the Lands are exactly laid down from my own Observations except the So. Coast of Palawan: The Scale is too small to express the many dangers in the Strait.' For the plan, see AN: Marine 6JJ 63(150), and Catalogue B10 690000c Eastern Asia.

²⁷ Dalrymple to D'Après, 17 May 1769 (AN: Marine 3JJ 340(4)).

²⁸ Dalrymple to D'Après, 11 July 1769 (AN: Marine 3JJ 340(4)): 'In my Letter of 31st Jany I begd a List of the Charts & Plans you mean to engrave; & a List of of Charts and Particular Plans of the Philipinas in your possession: I at the same time begd to know if you had anything of Borneo.'

²⁹ He acknowledged receipt of Faveau's chart on 28 February 1769, solicited a copy of Faveau's journal, and acknowledged receipt of that on 17 May (AN: Marine 3JJ 340(4)). As well as using Faveau's chart for comparison, he copied it and later published it himself (Catalogue B220 810417 Paragua).

³⁰ The first of two preliminary issues of volume I of *An Historical Collection of the several Voyages and Discoveries in the South Pacific Ocean* has a 1769 title-page, and the first form of the dedication dated 14 October 1769. The second preliminary issue, though retaining the October dedication, has a cancelling title-page with imprint dated 1770 (see Catalogue A11).

³¹ 'The tract I mean to print will contain all the circumstances I have met with relative to the islands, &c. in this ocean: I also mean to insert Halley's journal from Rio Janeiro to Trinidad; Bouvet's from St. Catherine's to Cape Circumcision; the abstract of La Roche's from the strait of his name to Isla Grande, &c.' (*Memoir of a Chart of the Southern Ocean* 1769, pp. 4-5).

³² *An Historical Collection of the several Voyages and Discoveries in the South Pacific Ocean: Volume I* 1769/1770, third issue, advertisement on reverse of half-title page. Neither preliminary issue (see note 26) carried an advertisement in this position.

³³ AN: Marine 3JJ 340(5). For a discussion of the materials Dalrymple

had assembled for his parallel work on the Philippines, see chapter 3, pp. 81-83 below.

³⁴ Later published: see Catalogue B33 710121 China.

³⁵ Later published: see Catalogue B34 710419 China Sea. The chart of Cochin-China remained unpublished, but see Catalogue B842 971101 Cochin-China where part of it was incorporated.

³⁶ Dalrymple to D'Après, 27 April 1770 (AN: Marine 3JJ 340(5)).

³⁷ East India Company, Court Minutes, 15 March 1770 (IOR: B/85, p. 468).

³⁸ Dalrymple to D'Après, 7 September 1770 (AN: Marine 3JJ 340(5)): 'Two days ago I was appointed to the command of a ship belonging to the East India Company which will sail in the end of November. I shall probably remain in India at least three years.'

³⁹ Dalrymple to D'Après, 14 December 1770 (AN: Marine 3JJ 340(5)). Dalrymple to Court of Directors, 27 December 1770 (IOR: E/1/54, p. 219): 'As I am getting a Chart engraved of the Coast of China & Islands at the Mouth of Canton River which may be very useful to the Company's Ships I beg leave to present Six proofs for the Ships now ready to depart for China altho all the Names are not engraved as it cannot be finished in time for those Ships.' The chart (Catalogue B33 710121 China) is unusual in having almost the names keyed from lists: the lists are incomplete in all known copies of the chart, but no example has been found with fewer names from the earlier proof printing.

⁴⁰ Dalrymple to D'Après, 29 January 1771 (AN: Marine 3JJ 340(6)).

⁴¹ There had been some disagreement in November and December 1770, most notably over Dalrymple's wish to take an artist on the expedition (East India Company, Court Minutes, 14 December 1770 (IOR: B/86, p. 291)), but the irretrievable break came in a letter from Dalrymple of 5 March 1771 (IOR: E/1/55, pp. 66-66h) over the appointment in London of a factor for Balambangan.

⁴² Dalrymple to Court of Directors, 18 April 1771 (IOR: E/1/55, p. 207).

⁴³ Dalrymple to D'Après, 15 November 1771 (AN: Marine 3JJ 340(6)): '... there is a very great error in the latitudes of the So part of Borneo, in the Chart which was to be added to that of the China Sea, it was indeed only meant as a sketch to convey an idea of the figure of Borneo & was engraven when I was ready to embark for India so that I could not pay that attention which You will know, is necessary to things of this nature.'

⁴⁴ *Memoir of the Chart of the China Sea* 1771, p. 11.

⁴⁵ *An Historical Collection of the several Voyages and Discoveries in the South Pacific Ocean*, volume II 1771 (Catalogue A12).

⁴⁶ *An Historical Collection of the several Voyages and Discoveries in the South Pacific Ocean*, volume II 1771, first part (see Catalogue A12), advertisement on p. [12] (2†B2v).

⁴⁷ Dalrymple to Court of Directors, 18 April 1771 (IOR: E/1/55, p. 207a).

⁴⁸ *Plan for Extending the Commerce of this Kingdom* 1769, second issue 1771, p. 112.

⁴⁹ Dalrymple to Court of Directors, 25 May 1771 (IOR: E/1/55, pp. 260a-260b): 'The Company, in sending me notice, may have in a few days as many Setts as they please, of the Charts I have published & of the Memoirs explaining them, as mentioned in the List annexed to the Plan, at 2 Guineas p[er] Sett.'

⁵⁰ Catalogue B36 711210 Sulu.

⁵¹ *Essay on the Most Commodious Methods of Marine Surveying* 1771; *Memoir of a Chart of the China Sea* 1771; *Memoir of a Chart of Part of the Coast of China* 1771; *Journal of the Schooner Cuddalore on the Coast of China* 1771; *Journal of the Schooner Cuddalore on the Coast of Hainan* 1771; *Memoir of the Chart of the West Coast of Palawan* 1771 (Catalogue A13-A18).

⁵² Catalogue B24 710000i Grand Ladron diagram. This diagram of lines and bearings is on the same scale as the chart (Catalogue B33 710121 China) of which it demonstrates the construction of central part.

⁵³ Dalrymple advocated this use of Hadley's quadrants for taking bearings for views of land. The fullest exposition is in the unpublished treatise *Practical Navigation* [1790] (Catalogue A175), pp. 74-79, but Dalrymple was a consistent advocate throughout his life. See, for example, his instructions to his artist-engraver Patrick Begbie in 1781 on taking views: 'If Mr. Begbie will take the Trouble to add the Alt[itude]s by Hadley's Quadrant of the remarkable Lands and the Angles by Hadley held horizontal Mr. D. will be further obliged.' (Dalrymple to Begbie, 17 May 1781 (IOR: MSS. Eur. C.483)).

⁵⁴ Announced in advertisements in *Memoir of the Chart of the Bay of Bengal* 1772 and *Letter to Dr. Hawkesworth* 1773 as available from Elmsly.

⁵⁵ Dalrymple to D'Après, 6 July 1771 (AN: Marine 3JJ 340(6)).

⁵⁶ Dalrymple to D'Après, 3 September 1771 (AN: Marine 3JJ 340(6)). For a discussion of this non-publication see chapter 3 below.

⁵⁷ Dalrymple to D'Après, 13 March 1772 (AN: Marine 3JJ 340(7)). See *General Introduction to the Charts and Memoirs* 1772, pp. i-iii.

⁵⁸ Dalrymple to D'Après, 2 July 1772 (AN: Marine 3JJ 340(7)); East India Company, Court Minutes, 8 May 1772 (IOR: B/88, pp. 26-27); J. Nichols, *Illustrations of the Literary History of the Eighteenth Century*, 8 vols. (London, 1817-1858), vol. iv, p. 545 (Dalrymple to Herbert, 4 May 1772).

⁵⁹ *General Introduction to the Charts and Memoirs* 1772, pp. viii-xl.

⁶⁰ Dalrymple to D'Après, 13 March 1772 (AN: Marine 3JJ 340(7)).

⁶¹ For contemporary East India Company manuscripts of Plaisted's and Ritchie's surveys, see IOR: X/3772-3773.

⁶² East India Company, Court Minutes, 8 May 1772 (IOR: B/88, pp. 26-27).

⁶³ Nichols, *Illustrations*, vol. iv, p. 545 (Dalrymple to Herbert, 4 May 1772: 'Mr. D. has also sent a proof of a Memoir concerning a Chart of the Northern Part of the Bay of Bengal, which is in hand, ...').

⁶⁴ *Memoir of a Chart of the Bay of Bengal* 1772, pp. 3-4.

⁶⁵ East India Company, Court Minutes, 8 May 1772 (IOR: B/88, pp. 26-27): '... Six memoirs of two Chart proposed to be made of the Northern part of the Bay of Bengal.'

⁶⁶ Dalrymple to D'Après, 11 August 1772 (AN: Marine 3JJ 340(7)).

⁶⁷ Catalogue B37 720915 Bay of Bengal.

⁶⁸ William Herbert, *New Directory for the East Indies*, first edition (London, 1758), and subsequent editions.

⁶⁹ J. B. N.-D. D'Après de Mannevillette, *Mémoire sur la Navigation de France aux Indes* (Rouen, 1765). See Dalrymple to D'Après, 29 November 1768 (AN: Marine 3JJ 340(3)), for Dalrymple's receipt of copies of the second edition of 1768.

⁷⁰ 'The large sheets will be 25 French inches by 18. The half-sheet plans 12½ x 9.' (Dalrymple to Court of Directors, 28 December 1768, announcing D'Après' proposals (IOR: E/1/51, pp. 176-176a). Dalrymple to D'Après, 8 September 1772 (AN: Marine 3JJ 340(7)): 'I beg the favour when you print off your new Edition of the Neptune Oriental that You will be so obliging as to print off a set for me on the same sized paper as my Charts that they may be bound up together.'

⁷¹ R.V. Tooley, *Dictionary of Mapmakers* (London, 1979), s.n. Jefferys.

⁷² Though he had a particular writing style Whitchurch was not, pace Tooley, solely a writing engraver. He engraved, among others, the unpublished Philippines charts in 1775: Catalogue B115 750106 Panay, B131 750405 Philipinas, and B133 750414 Cuyos (see Chapter 3 below). Smith engraved the Balabac chart (Catalogue B119 750120 Balabac) and the writing on one of Begbie's views plates (Catalogue B134 750419 London views).

⁷³ Andrew S. Cook, 'Alexander Dalrymple's *A Collection of Plans of Ports in the East Indies* (1774-1775): A Preliminary Examination', *Imago Mundi* 33 (1981), pp. 46-64, especially pp. 51-58. See also the series of views in south India which Henry drew and engraved for Dalrymple (Catalogue B136-B140 780915a-780915e). Henry went to Madras with Dalrymple on the *Grenville* in 1775, returning on the *Swallow* in 1776, drawing views of land on both journeys (see Chapter 3, p. 84 below). Dalrymple was still supporting Henry's widow privately in 1805: Public Record Office: PROB.10/3854 (Will of Alexander Dalrymple, 24 December 1798, clause 43: 'I bequeath to the generosity of The East India Company ... to continue the allowance of thirteen pounds a year to Mrs. Henry the widow of Mr. B. Henry who laid down & engraved many of the Plates I have published for the use of The Company's Ships ...'). This provision was not cancelled in Dalrymple's general revision of his testamentary dispositions in October 1805.

⁷⁴ For China paper, see Penny Jenkins, 'India Proof Prints', *The Paper Conservator* 14 (1990), pp. 46-56. Dalrymple reported its manufacture in *Oriental Repertory: Volume 2 Number II*, p. 284.

⁷⁵ Copy sold by Sothebys in New York, 8 October 1991.

⁷⁶ BL: 983.g.22.

⁷⁷ Dalrymple to D'Après, 2 July 1772 (AN: Marine 3JJ 340(7)).

⁷⁸ For examples, see: National Library of Scotland: AS.15.a.1;

Minneapolis, James Ford Bell Library: 1769 m Da.

⁷⁹ Dalrymple to D'Après, 11 August 1772 (AN: Marine 3JJ 340(7)).

⁸⁰ The charts re-engraved for the second edition of *Le Neptune Oriental* (Paris, 1775) were Catalogue B13 691020b Borneo, B15 701130 Felicia, B34 710419 China Sea, and B36 711210 Sooloo. The French engraver copied even the English imprint, and the French copies are most reliably identified by their sequential number in *Le Neptune Oriental* at the upper right corner of impressions. A volume of fair-copy manuscripts for D'Après' work was later acquired by the British Library from the collection of Barbie du Bocage: this contains the china paper printed charts sent by Dalrymple to D'Après in 1771-1772 (London, British Library: Add. MS. 15319, ff. 14 and 26-28 (Catalogue B34 710419 China Sea, B13 691020b Borneo, B15 701130 Felicia and B36 711210 Sooloo)).

⁸¹ Catalogue B11 690400 South America.

⁸² Catalogue B13 691020b Borneo.

⁸³ Catalogue B37 720915 Bay of Bengal.

⁸⁴ Dalrymple sent a copy of the slip to D'Après de Manneville in his letter of 10 November 1772 (AN: Marine 3JJ 340(7)).

⁸⁵ The pages of the cancelling sheet were set longer in the forme to accommodate the extra text. Where supplied loose, and inserted by the purchaser's binder, they consequently lack the traces of side-sewing stab holes consonant with issue as unbound pamphlets (see Catalogue A14). See Dalrymple to D'Après, 10 November 1772 (AN: Marine 3JJ 340(7)): 'I enclose a sheet of the Marine Surveying P 5 to 8 which I have reprinted, as I thought it was not before sufficiently distinct.'

⁸⁶ See note 54 above.

⁸⁷ Catalogue B37 720915 Bay of Bengal. The copper plate was engraved with Hydrographical Office markings after it was taken over by the Admiralty (see, for example, BL: Maps 147.e.17.(26a.)), but was withdrawn in 1830.

⁸⁸ Catalogue B13 691020b Borneo, B15 701130 Felicia, B34 710419 China Sea, and B36 711210 Sooloo.

CHAPTER 3

'AN ACCEPTABLE SERVICE TO THE PUBLIC':*

PROJECTS TO PUBLISH CHARTS AND PLANS OF THE EAST INDIES 1772-1779

A Collection of Charts and Memoirs in 1772 was the first instalment of Dalrymple's proposed publication of his voyages. In the *General Introduction to the Charts and Memoirs* he was already considering what might be published next, even though 'the very great expense of engraving may possibly prevent any further publication of this kind'.¹ He had the basis for another collection of charts and memoirs, of his voyages in the Philippines and Celebes and on the coast of Cochin-China. As a further similar exercise he suggested assembling his observations in his voyages between India and the Strait of Malacca, with charts and views. The third possibility was a publication, not from his own voyages, of 'Nautical Remarks and Charts of various parts of India, collected, sufficient to make a more complete Set of Charts and Sailing Directions than any hitherto published'. For Dalrymple in 1772 this was a project too large for him to contemplate while involved in others.

Dalrymple was occupied with the Bay of Bengal chart for more of 1772 than he had expected.² He was also engaged in July and August in proposing to Lord North an expedition of discovery and settlement in the South Atlantic Ocean,³ and in editing and printing the voyages of Halley and Bouvet, the latter in France with D'Après' assistance.⁴ But when the memoir and chart of the Bay of Bengal were completed he returned to was the series of charts from his own observations, chiefly of the Philippines, but also of the Carimata Passage and of Cochin-China, which had so far remained unpublished. Dalrymple had listed in

General Introduction to the Charts and Memoirs in 1772 the seven charts he wished to complete: Panay and the Cuyo islands, the Celebes in two sheets, the Strait of Sapy, northern Mindanao, Cochin-China, the Natunas and the Carimata Passage, and the islands between Luzon and Formosa. These were to be accompanied by seven journals, six in the Cuddalore between 1759 and 1761, and one in the London on the north coast of Mindanao in 1764, all with 'many Views of the Lands'.⁵ His difficulty throughout had been to connect his own observations of unidentified islands and headlands, and the tracks of the ships from which he was observing, with reliable coastline depictions from existing charts, taking account of the likely errors of longitude on either side. This was more of a problem for the outlying Philippines than for Borneo because of the infrequency of Dalrymple's passages and the uncertainty of his Spanish sources,⁶ and explains his repeated requests to D'Après for manuscript maps to corroborate his own.⁷ His intention, of February 1770, to produce similarly for the Carimata Passage 'a General Chart on a Scale of 3 Inches to 1°, containing all the Tracks of our Ships which have passed this way & the Islands they have seen', had grounded on the similar difficulty of reconciling observations of ships which had carried their longitude by dead reckoning too far from absolute points of reference to remain comparable.⁸ The third area for which his own observations were insufficient was the Indo-China coast, a hindrance in completing the China Sea chart in 1770,⁹ and still a problem in 1772.¹⁰ Dalrymple had continued to correspond with D'Après in 1772 about materials for the Cochin-China coast, but this subject too receded from Dalrymple's letters in 1773.¹¹

The second of Dalrymple's three ideas, 'Miscellaneous Nautical Observations, during my voyages through different parts of the Indian Seas; in the Strait of Malacca, amongst the Nicobar Islands, &c. with Charts and Views of Land', rapidly evaporated as a serious

proposition.¹² His experience in sailing between India and the China Sea was too limited: outward from Madras as a passenger in *Winchelsea* in 1759, returning as captain of *Cuddalore* in 1762; outward and return passages as captain of *London* in 1762 and 1763, the return in foul weather to Pulicat; and outward as a passenger in *Neptune* to Sulu in 1763 on his return to England.¹³ The Andaman Sea and Malacca Strait route was well enough travelled by country ships, if not by East Indiamen,¹⁴ to make Dalrymple's running observations neither comprehensive nor authoritative in the way that he could legitimately claim for Borneo and the Philippines. Charts by Bartholomew Plaisted and John Ritchie hampered Dalrymple's construction of the chart of the northern part of the Bay of Bengal in 1772, and he reduced its scope because of the unreliability of information to the southward.¹⁵ Ritchie's manuscript charts from his 1770-71 surveys of the Bay of Bengal and Andaman and Nicobar Islands¹⁶ arrived in London in April 1773, sent from Bengal to the Court of Directors by James Rennell in November 1772.¹⁷ Dalrymple found Ritchie's new charts distinctly unsatisfactory:

The Surveys, as they were called, of the East side of the Bay of Bengal, have been at last received; but instead of Surveys they are very imperfect sketches, & disagree very much with the Charts, I had before in my possession, of those parts. I shall when I have leisure endeavour to make one chart from all the materials in my possession but as these materials are neither compleat nor entirely consonant it must be a work of labour & time.¹⁸

He later issued individual plans of the Sambeelan Islands and Camorta from Rennell's surveys on his own *London* voyage,¹⁹ but did not consider the area again seriously until 1784, when he published Ritchie's journal with a collection of coastal charts and plans from Chittagong to the Nicobar Islands, many from manuscripts by Ritchie, Plaisted and other members of the Bengal Pilot Service.²⁰

Dalrymple was attracted again in 1773 to the third of the 1772 options, the collection of 'Nautical Remarks and Charts'. He was distracted from

his Philippines chart compilation in 1773, partly by his exchange with John Hawkesworth over the latter's *Voyages*,²¹ but more significantly by problems in reconciling his own observations in the Philippines with imperfections in earlier charts and plans. There was no previous suggestion in letters to D'Après that Dalrymple was moving in this direction,²² but he announced in August 1773 'Proposals for engraving by Subscription sundry Plans of Ports, &c. in the East-Indies',²³ as a new venture for public benefit. He saw it as useful to navigators to have plans of harbours 'whereto they may be carried by chance or accident, as well in as out of the common and accustomed tracks'. His intention was to engrave and publish the plans in his own collection and in his copy of the sixth volume of Van Keulen's *Zee-Fakkel*, and he referred directly to the lists of their contents which he had published the preceding year in *General Introduction to the Charts and Memoirs*.²⁴ Almost all Dalrymple's collection were contemporary copies: manuscript copying was the standard means of acquiring and transmitting cartographic information.²⁵ The Van Keulen collection, as the first publication, by the Dutch East India Company in 1753, of previously confidential charts, plans and sailing directions, was for some years (and for Dalrymple in particular) equivalent to a primary source. He proposed to issue nautical instructions and plates of views of land to accompany them.

Dalrymple's proposal highlighted particular plans which had provoked the decision to begin to exploit his own collection:

General Charts wherein there is hardly the least similitude to the places to which they relate are frequently to be seen; but particular plans are scarcely ever without some resemblance; I have indeed met a few such particular plans: ... After what I have already published it may perhaps be unnecessary to say that the Plan of Zolo, published by Mr. Swithin, is amongst the few I have seen where there is no resemblance to the place. Such also is the Plan of the Bashee Islands in Dampier's *Voyages*.²⁶

James Swithin had published a chart of Sulu in the 1760s, together with a short text of sailing directions and topographical description, to illustrate the loss of the *Griffin* off Basilan in 1761 and the subsequent refuge of the remaining ships of the *Griffin's* fleet at Sulu.²⁷ The *Griffin* had struck and foundered while Dalrymple and the *Cuddalore* were escorting the fleet from Canton through the Philippines and the Strait of Macassar towards the Strait of Sapy and open ocean.²⁸ Dalrymple published his own chart of Sulu in 1770,²⁹ quite different from Swithin's, and was privately severely critical of Swithin's observations.³⁰ Dalrymple's work of the early 1770s to precise his own observations in the Philippines had led him to consider existing charts not only of Sulu, but of the Bashee Islands north of Luzon where he had sailed in *Cuddalore* in 1759.³¹

Though Dalrymple contemplated including views of land in his publication, he excluded smaller-scale charts of large areas, formed by editorial compilation:

The Work here proposed is intended to be a mere Pilot-Book, consisting entirely of particular plans, without any General or Coasting Charts.³²

He did not wish to compete in chart construction with D'Après de Mannevillette, the new edition of whose *Le Neptune Oriental* was nearing completion. Dalrymple had long been acquainted with the 1745 edition of D'Après' work,³³ and with Herbert's re-engraving of the D'Après charts (with occasional revisions) as *New Directory for the East Indies* in 1758.³⁴ He had been enquiring about the progress of the new edition since the beginning of his correspondence with D'Après,³⁵ and had been promoting it to the Admiralty and the East India Company from 1768 onwards.³⁶ In February 1770 D'Après sent a list of the proposed contents,³⁷ and in July 1773 a complete prospectus.³⁸ Dalrymple had translated the prospectus and arranged for Elmsly to sell *Le Neptune Oriental* for D'Après in England.³⁹ Though Dalrymple had not, of

course, seen a copy of D'Après' new edition in 1773, he could write to D'Après with confidence:

You will perceive the work proposed does not interfere with what you are engaged in, as it does not contain any general instructions or coasting charts.⁴⁰

Dalrymple's proposal to publish plans of ports was carefully defined: he had earlier made it clear that it would be possible to make a set of charts 'more complete ... than any hitherto published', but only as a long-term objective of a full-time occupation. Dalrymple had seen, during six years of correspondence, the slow pace at which D'Après was revising *Le Neptune Oriental*. What Dalrymple was intending was 'an exact publication of such pieces as are thought worth engraving', each with its discrete stated authority. He would not vouch for the accuracy of the plans, but left it to subscribers to point out which were unreliable.⁴¹ He was not disturbed that particular plans might later prove inaccurate: unlike the charts he was painstakingly compiling, the plans were issued as a service to others, their content not his responsibility. Dalrymple was acting here as editor, not as author. The same letter to D'Après announced the East India Company's approval of Dalrymple's proposal, its subscription of 100 guineas, and a list of the plans Dalrymple planned to engrave first: Algoa Bay, Mossel Bay and Bay St. Bras, on the southern coast of Africa; Tuléar, Manambao and Mahavavy, on Madagascar; Mayotte, Comoro Islands; Zutphen Islands and Mew Bay, in the Strait of Sunda; Penang, Siak River, and Sambeelan Islands, in the Strait of Malacca. The first six were to come from Van Keulen, and the remainder from manuscripts in Dalrymple's collection.⁴² With the plans were to be issued 'nautical instructions ... together with such other explanations as are in my possession'.⁴³ According to the terms of subscription, the work was to be in quarto, and the plans were to be 'published in Numbers as the Engravings can be conveniently made'.⁴⁴

During the next months Dalrymple selected and prepared charts for engraving: he applied to the East India Company in December 1773 for payment of the promised subscription,⁴⁵ and by 10 January 1774 he had thirty plates 'almost entirely finished'.⁴⁶ The first number of *A Collection of Plans of Ports in the East Indies* was issued in February 1774, made up of nineteen plans and 32 pages of letterpress explanations.⁴⁷ Six of the plates were re-engravings from Van Keulen, and thirteen from manuscripts in Dalrymple's own collection. The arrangement of plans and text each followed a geographical order, commencing at the Cape of Good Hope with Bay St. Bras and traversing the coasts and islands to Redang, off the east coast of Malaya. The plans were a standard size of 9 x 12 inches, intended to be bound together with the quarto letterpress, if not precisely interfiled. With six plans from Van Keulen there was a particular emphasis on ports in southern Africa, Madagascar and the Comoro Islands. The text pages followed approximately the same geographical order as the plans. Otherwise English sources in Dalrymple's collection of manuscripts naturally predominated, with French and Dutch plans also used, some from considerably earlier in the century. The publication did not proceed entirely smoothly: the promised Anjouan plan was omitted (leaving a vacant stub or guard) after the contents list had been printed, the Comoro plan had a view of land engraved and erased before printing, and on 11 February Dalrymple requested a further subscription from the Company.⁴⁸

The second number, which appeared in May 1774, Dalrymple devoted to plans of harbours on the west coast of Sumatra and in the Mentawai Islands, closely tied to three main sources in the accompanying letterpress text.⁴⁹ As 'explanations', Dalrymple printed extracts from the journal of Commodore John Watson in the *Revenge* on the Sumatra coast in 1762, with additional sailing directions from Captain George

Baker.⁵⁰ With these he published 'An Historical Relation of the several Expeditions from Fort Marlborough to the Islands adjacent to the West Coast of Sumatra' between 1749 and 1757, including John Whiteway's voyage in the *Cuddalore* which resulted in six plans, and an account of the voyage of *Borneo* to Engano in 1771 with a description by the surveyor Charles Gustavus Wahlfeldt.⁵¹ This account of the expeditions to the Mentawai Islands was later issued as a separate reprint, though it did not appear in that form in 1775.⁵² The process of editing and printing the plans continued to prove uncertain: the plan of Keyser's Bay was held back for comparison with another source, and a totally unrelated plan of Kharg island, in the Persian Gulf, which happened to be ready, was substituted.⁵³ The first of the promised plates of views of land was published in this number: the plate of 'Sumatra views' resembled the 1771 plates of Dalrymple's China coast voyages, though the views were derived from Watson and Captain Thomas Forrest, as well as Van Keulen and the 'E. India Company's Collection'.⁵⁴

Dalrymple's intention of May 1774 was that the next three numbers, taken together, would cover ports from East Africa to the Philippines,⁵⁵ but only the third number, in August 1774, preserved geographical coherence. The twelve plates, were all of ports in the Philippines (including Mindanao): seven (some composite plates with two plans) derived entirely or in part from copies Dalrymple had made in the Philippines in 1761 from manuscripts in the collection of Don Manuel Galves, governor of Zamboanga.⁵⁶ The fourth number also contained twelve plans, though entirely miscellaneous, and was issued in December 1774.⁵⁷

How long Dalrymple would have succeeded in maintaining the flow of the series, even at 12 plans a number, is doubtful. There is some sense that the best manuscripts in his own collection had now been used, and

that he was drawing more from outside sources in later numbers.⁵⁸ But the argument is obscured by his soliciting of new plans from others' collections,⁵⁹ and by the haste with which he wound up his *Collection* in March 1775 to resume a mainstream East India Company career at Madras. It was while he was pursuing, through the Court of Directors and through the General Court of Proprietors, his reinstatement as a Company servant at Madras with his old seniority,⁶¹ that he brought his *Collection* to a hurried close with the issue of the fifth and sixth numbers, giving a total of eighty-three plates of plans.

No separate preliminary pages have been found for the fifth and sixth numbers, and evidence from surviving copies suggests only that together they comprised five groups of letterpress pages and two groups of plans.⁶² The letterpress comprised a section of explanations of plans (including a paper reprinted from *Philosophical Transactions*, an introduction giving a full list of the plans and incorporating most of the introductory notes from the first four numbers, two separate title-pages and a tabular index. The main group of seventeen plans, like the plans in the fourth number, was not focussed on a particular area, nor were the plans taken from a single source. Eight of the seventeen plans were of ports on the west coast of India, particularly the Malabar Coast, and three of these came from copies of the 1725 surveys of Elias Bates in the Company's records.⁶³ The Keyser's Bay and Johanna plans, held over from earlier numbers, were also included among the seventeen. The other group of plans were re-issues, after re-engraving, of five plans from the first number.⁶⁴ After experiments in February 1774 by Benjamin Henry in engraving with stone, Dalrymple had Henry engrave the coastal views on the five plan plates more deeply with stone, and appears to have issued the resulting impressions as replacements. Dalrymple made small changes to other plan plates and text pages,⁶⁵ not sufficiently important to warrant re-issue to

subscribers, but noticeable in the extra copies of the complete *Collection* later available for sale.⁶⁶

By the time of his departure for India on 24 April 1775 Dalrymple had completed not only *A Collection of Plans of Ports* in March but also *A Collection of Voyages in the South Atlantick Ocean* in April. This latter project had lain fallow since 1773, when Dalrymple had had Halley's voyages printed in London and Bouvet's voyages printed in Paris. Nothing new was added to *South Atlantick Ocean*, and its publication then, with a cursory introduction, shows Dalrymple rounding off unfinished business in London in preparation for a protracted stay in Madras. In his last days in London he completed the delivery of residual stocks of his publications to his booksellers, John Nourse receiving consignments on 19 and 21 April.⁶⁷ Dalrymple also lodged his copper plates with Nourse: the latter's undated 'List of Copper Plates contained in a Chest sent to the Bank' includes all 83 plates from *A Collection of Plans of Ports*, together with the plates from *A Collection of Charts and Memoirs* and *South Pacific Ocean*, the Bay of Bengal plate and the South Atlantic Ocean plate.⁶⁸

In the March 1775 introduction to *A Collection of Plans of Ports* Dalrymple wrote of the work:

I have the satisfaction to consider it is some addition to the General Mass of Geographical Knowledge, and therefore that my pains and labour have not been thrown away, but that I have this Record of having done Something in 1774, and consequently that I have not lost a year, altho' I have been drawn into a considerable Expence, contrary to my intention, ...⁶⁹

For Dalrymple the publication of plans of ports had been a diversion: to be compelled to conclude it hurriedly in order to resume his conventional East India Company career meant leaving his main project, to compile charts for the Philippines and the China Sea, hanging unfinished without any publication to show for his work. In 1773 he

had struggled with inadequate data to compile a set of charts to match his *Collection of Charts and Memoirs* of 1772. After the appearance of the first number of *Plans of Ports*, his proposal that he should be appointed to a new Company office 'for collecting and publishing observations from the Journals of Ships and for drawing and printing Charts for the improvement of Navigation' fell foul of a Company bye-law governing the creation of new offices.⁷⁰ On 17 June 1774, after the first two numbers of the *Collection of Plans of Ports* had appeared, he put a modified proposal to the Court, for the publication of charts of the seas from Balambangan to China.⁷¹ The proposal does not survive, but the Court's resolution of 13 July is so precise as presumably to follow the tenor of the proposal: on the recommendation of the Committee of Shipping, Dalrymple was to receive 200 guineas for engraving and printing charts from Balambangan to China, and 300 guineas similarly for charts of the Eastern Seas, each plate to become Dalrymple's property after the delivery of 100 impressions to the Company.⁷² Already the day before the Court considered his proposal Dalrymple was writing to D'Après reviving his work on the Carimata Passage chart of 1770,⁷³ and the following month he sent D'Après a list of charts under way, soliciting views and observations of the southern Philippines.⁷⁴ By November he had made considerable progress, though with an arrangement of charts very different from his 1772 plan:

I am very impatient to see M. Crozet's Voyage as I have at present in the hands of the Engraver a Chart of the Philipinas; this Chart contains my own Tracks thro' these Islands but I mean to add the other parts from the best materials in my possession and hope to obtain assistance from M. Crozet: The Chart I have in hand will join to that already published of the No. part of Borneo & the Sooloo Islands to which I have added the Soundings, and in two other Plates will extend to Formosa comprehending the Bashees &ca.⁷⁵

This is probably the same chart which Dalrymple described on 10 August 1774 as 'another Work I have now in hand, viz. a Chart of

the Philipinas which will be accompanied with Nautical Observations and Instructions and many Views of Land'.⁷⁶ His method of working was personal: of the Philippines chart he said:

I intend to engrave on the Plate what is laid down from my own Observations; and, after taking a few Impressions from it in that State, to add from what other materials I have, or can collect, such parts as I have not been able to lay down from my own observations.⁷⁷

To assist his cartography Dalrymple had already had printed in Spanish the text of the *derrotero*, or description of the coast of Luzon, of Manuel Correa, which he had been given by Don Manuel Galves in 1761.⁷⁸ Two other descriptions of parts of the Philippines, by Antonio Gil, were printed in Spanish at the same time,⁷⁹ but by 1774 Dalrymple had abandoned the search he had begun for the separate charts and plans constructed by their authors.⁸⁰

With this knowledge of the proposed composition of the Philippines-Celebes-Cochin-China collection and with information of Dalrymple's modifications of 1774 and 1775 and his method of working, it is possible to identify elements of his work in impressions from unpublished plates or re-used in later publications. No exactly contemporary editions are known of the seven journals proposed in 1772, but two were issued later by Dalrymple as separate publications for the East India Company: *Journal of Ship London ... along the North Coast of Magindanao* 1781, and *Journal of the Schooner Cuddalore through the Strait of Sapy* 1793.⁸¹

Of the charts in the 1772 list, that of Carimata Passage was in progress in 1774.⁸² It was later engraved in the preliminary form Dalrymple preferred, without title, bearing an imprint date of June 1780.⁸³ Dalrymple's proposal to the Court of Directors in June 1774 resulted in changes of coverage in the series of charts from Balambangan to China: the Borneo and Sulu map of 1769 was revised with the addition of

soundings to become the first in the series, and given a new publication date of 2 February 1775.⁸⁴ The 'chart of the Philipinas' contiguous with it, and extending from Dapitan on Mindanao to Manila, is known, though without title, from a few impressions of the preliminary state described by Dalrymple.⁸⁵ It has no borders outside the neatline at top and bottom, and was designed to join to its neighbours. The next chart to the north, in the chain towards China, extended from Manila in 14°N to the islands north of Luzon in 22°N. It is known, also without title, from one example, an impression of the preliminary state, with an engraved date of 24 September 1781.⁸⁶ These two effectively replaced the first and last in the 1772 list, though with different extent and with scale changed from 10 to 20 nautical miles to 1 inch to fit the Borneo and Sulu chart of 1769. The second, third and fourth charts in the 1772 list, of the Celebes, of Sapy Strait and Flores, and of Mindanao, belonged to the Eastern Islands part of Dalrymple's June 1774 proposal, and were apparently not yet prepared in 1775.

Dalrymple had three smaller charts engraved in 1775, not part of the series proposed in 1772, and never formally published: 'Track of the Schooner Cuddalore along the East Coast of Panay ...', 'Chart of Part of the Philipinas, ...' and 'Chart of the Cuyos, and Part of Panay.'⁸⁷ They represent parts of the area of the 'Philipinas' chart, but on a larger scale. Accommodating more soundings, they served as documents from which the smaller-scale chart could be generalised. The topographical detail in each is fragmentary, following Dalrymple's practice of taking preliminary impressions as a basis for adding further tracks, observations and revisions. Each was engraved by Whitchurch, following Dalrymple's standard conventions, as though it was to be published. In style they resemble the small chart of Balabac which

Dalrymple had Whitchurch engrave in 1775 from Faveau's chart of Palawan, but which he issued only in 1783.⁸⁸

In addition to the charts, Dalrymple had planned in 1772 to engrave a number of plates of views of land taken from the ships whose journals he proposed to publish. One of these plates of views was engraved in 1775, the remaining fifteen bearing 'publication' dates from June 1781 to October 1783.⁸⁹ Dalrymple prepared plates of views for each of the journals in his list, covering the whole area of his proposed collection, though he published only one, 'Strait of Sapy, Sumbawa and Mangery or Floris by QD. 1761' illustrating *Journal of the Schooner Cuddalore through the Strait of Sapy 1793*.⁹⁰ The rest, though resembling published views, appear in none of Dalrymple's lists of his publications: none is present in contemporary collections of Dalrymple's published works.⁹¹

In March 1775 Dalrymple had reached the position where he had set out his plan of chart coverage, and was proceeding to evaluate ships' journal accounts. Compilation and engraving activity in both the Philippines-Celebes project and the Carimata Passage project had been going on in parallel with *A Collection of Plans of Ports* in 1774 and early 1775. Dalrymple's campaign to be restored to East India Company service, and to his rank at Madras, which lasted from 3 March (the date of his request to the Court of Directors) to 11 April 1775 (when he was sworn in),⁹² severely affected progress. He made efforts to continue with the work for which he had received 500 guineas: on 14 April he obtained permission from the Court to take ships' journals from East India House in Grenville for his passage to India, to enable him to complete the set of charts.⁹³ The engraving of the small preparatory charts of Cuyo Islands and the Philippines was completed in April in time for his departure.⁹⁴ Dalrymple took the engraver

Benjamin Henry with him in the *Grenville* to Madras, but employed him on the voyage and in Madras chiefly as an artist.⁹⁵ How far Dalrymple was able to progress with chart compilation in Madras is not clear.⁹⁶ He was immediately involved in the discord among members of the council, and when permitted to return to London via Suez and Marseilles with despatches concerning Pigot's detention he travelled light, expecting to remain only a short time in England before returning to Madras.⁹⁷

Though he left the bulk of his books and papers in Madras for his intended return, Dalrymple did carry the materials for the Carimata Passage chart on his overland journey in 1777. After the discussions on the Pigot affair in the Court of Directors and General Court of Proprietors has subsided in the summer of that year,⁹⁸ Dalrymple resumed work on that chart at least, despite his limited resources, reporting to D'Après de Manneville in October that:

I am at present engaged in finishing a Chart of the Carimata Islands, Banca &ca. on a scale of 3 inches to 1°. You were so obliging many years ago to promise me the views of the Islands seen by the Camel & Elephant which however I have never received: I shall be much obliged to You for M. Crozet's Journal around Billiton & his Chart on a larger Scale than that in the Nept. Orient. I find it no easy matter to reconcile the different Journals in this quarter; & hope to profit by M. Crozet's Observations. I shall introduce in this Chart The Observations of the Eagle which came down along the W. Coast of Borneo from Balambangan to Carimata.⁹⁹

By this time Dalrymple was already under the Court's summons to Madras council members to return to London for investigation of their conduct.¹⁰⁰ He had already told D'Après in July that he was to remain longer in England,¹⁰¹ though at first he continued to regard his separation from his working collection of papers as temporary.¹⁰² But by October 1777 he had sent out instructions to have his collection shipped home, and was expecting to receive the consignment in April 1778.¹⁰³ Nothing had arrived by October 1778,¹⁰⁴ and Dalrymple was

continuing to rely on journals and views from D'Après for making progress with the Carimata Passage chart. The state of war between Britain and France was hampering communications, and by December of that year a degree of exasperation had set in:

I have made some progress in a Chart of that Sea but the contradictions are insupportable. I shall however resume the task shortly; ... As soon as I have got this Chart in a tollerable state I will send a copy for your inspection.¹⁰⁵

By December 1778 the recovery of Dalrymple's books, charts and papers had become an official matter, the subject of a paragraph in a despatch to Madras, and he expected their arrival in 1780.¹⁰⁶ In the event it was 1781 before Dalrymple was completely reunited with his collection, and with the materials for his longstanding chart projects.

In 1781 he continued preparing the series of views which he had promised in 1772 and begun in 1775. Eleven plates of views are known to have finished engraving in that year,¹⁰⁷ besides the preliminary version of the Luzon chart. Two small plans, of Ivanna Bay in the Babuyan Islands and of Musa Bay on Batan, between Luzon and Formosa, had been engraved for this project in 1774, though not published then.¹⁰⁸ To these were added three plans of anchorages in the Natunas and Anambas engraved in October and November 1781,¹⁰⁹ also unpublished but described in 1783 as 'the Plates belonging to a Separate Work not yet published'.¹¹⁰ This was Dalrymple's last reference in print to his collection of charts and memoirs of the Philippines and Celebes as a live project. Though he produced three more plates of views in 1783,¹¹¹ the forced hiatus from 1776 to 1781 had broken the continuity of his work. Dalrymple's exasperation at the difficulties in reconciling sources for the Carimata Passage chart indicates how intellectually frustrating was the exercise of compiling charts from fragmentary observations at and beyond the perimeter of reliable knowledge. The need for developing knowledge of the

Philippines passage to China had diminished in the 1770s with the abandonment of the settlement at Balambangan, and the increasing use of chronometers on East India Company ships reduced the value and utility of charts constructed from earlier observations without this longitude control. With the exception of the Carimata Passage chart, he laid the projects aside soon after 1783,¹¹² and the East India Company appears to have written off the 1774 payment of 500 guineas.

The Cochin-China part of Dalrymple's 1772 proposal has a different story. It did not figure in his Company-funded 1774 project, and Dalrymple came back to his materials only many years later, through a new interest in Cochin-China. The chart of his Cochin-China voyage of 1760 was engraved in 1797, and then only in preliminary form, without title, as the third part of an unpublished plate of parallel depictions of coastline.¹¹³ In the same late period, four plates of views of land from the same Cuddalore voyage were fully engraved but apparently not published; three bear dates in 1803, the fourth a date in 1795.¹¹⁴ Dalrymple's interest in Cochin-China in 1803 is documented:¹¹⁵ the 1797 chart represents the first resurgence of his 1760 interest.

Other influences contributed to the change of direction in Dalrymple's career in the 1770s which left stranded his unpublished, and unpublishable, charts of the Philippines and the Carimata Passage. These were Dalrymple's championing of the use of chronometers in providing sequences of observations for chartmaking, and the publication of the unsatisfactory second edition of D'Après de Manneville's *Le Neptune Oriental* in 1775.

Dalrymple's first recorded use of a chronometer was in Grenville in the journey to India in 1775. Pigot owned one of John Arnold's early box chronometers, and he carried it with him to India, presenting it to the

Grenville's captain, Burnet Abercromby, on his arrival in Madras.¹¹⁶ Dalrymple (with Claud Russell) maintained a journal throughout the voyage: their daily recordings included comparative figures for longitude by account, by timekeeper, and (where possible) by the mean of a series of lunar observations.¹¹⁷ From the differences between longitudes by account and by timekeeper he calculated the prevailing daily current. When he travelled back to Suez in 1776, *en route* to London, Dalrymple borrowed the chronometer from Abercromby and carried it with him in the *Swallow*.¹¹⁸ If he had not known Arnold before he departed for Madras, he was quick to make contact with him in London in 1777, commissioning a chronometer for himself in 1778.¹¹⁹ Already in December 1777 he was writing to D'Après that:

I have some intention to publish a Table of those Places whose Situations have been determined by Astronomical Observations

and sending a diagram of the layout of the form.¹²⁰ He contemplated using longitudes established by solar eclipse (the transit of Venus, for example) or lunar eclipse, more regularly by observations of lunar distances or of the satellites of Jupiter, and by 'Watch or Timekeeper'. He was soliciting D'Après' help in obtaining information of additional observations not already in *Connaissance des Temps*, in order to build an extensive network of places of known longitude. One purpose of such a network became clear in the pamphlet Dalrymple issued to accompany blank track charts in January 1778:

A Comparison of the several Tracks of the Company's Ships would, in a few years, determine with great precision what is, at every Season, the most eligible course to pursue out and home?

The improvement made lately in the Art and Practice of Navigation, by the Lunar Observations for determining the Longitude, and by the use of Time-keepers, will be very conducive towards explaining the Currents, that most curious and important Phenomenon in Nautical History. ...

The Position of the Places, whose Situations have been determined by Astronomical Observations, are marked with * on the Chart, as by them the Tracks ought constantly to be corrected, as well those kept by the Time-keeper, as those by the Reckoning; since it is by these Comparisons alone, that it can be satisfactorily determined what reliance

can be placed on Time-keepers and Lunar Observations from Place to Place.¹²¹

The list of places selected was determined by the pattern of East India Company sailing. Besides Lizard Point and Cape Finisterre it gave geographical co-ordinate for almost all the places likely to be sighted last for a 'fresh departure' for the long South Atlantic and Indian Ocean leg of the eastward journey: Fayal, Pico and Flores (Azores), Madeira, Ferro and Tenerife (Canary Islands), Praia (Cape Verde Islands), Fernando Noronha, Recife, Rio de Janeiro, Ascension, St. Helena, and Cape of Good Hope. For the Indian Ocean it included St. Augustin (Madagascar) and Mauritius for Bombay and Madras ships. Bombay, Fort St. George (Madras), Fort William (Calcutta) and Goa were included as a matter of course, and, as reference points for the return journey, Canton (with Grand Ladron), Batavia, and Bencoolen. Banggi (for Balambangan), Goat Island (for Manila) and Temontangis (Sulu) were the product of Dalrymple's own observations. He was to provide blank journal forms for recording daily latitudes by dead reckoning and by noon observation, and longitudes by dead reckoning and by lunar observations or chronometer, encouraging ships' officers to calculate the daily differences between the two types of reading as the effect of ocean current, and to display it cumulatively on the track charts. When he put this proposal to the Company in January 1778, the Court ordered 100 copies of his graduated chart to be supplied four to a ship for that season.¹²² If used accurately as intended, these completed charts and journal extracts would have provided data for profiles of the currents experienced by each ship on different parts of its route. The fixed points would serve to correct the intermediate daily longitudes of ships arriving with chronometers, and to enable departing ships to determine their subsequent daily longitudes more accurately.

But there appears to have been a second purpose behind Dalrymple's advocacy of the use of time-keepers. In 1774 and 1775 he had been avoided open competition with D'Après de Manneville in small-scale coastal charts, while waiting for the new edition of *Le Neptune Oriental*. D'Après' revised work was eventually published while Dalrymple was in Madras, and the copies sent there for him and for Pigot arrived after he had begun his return journey.¹²³ Dalrymple probably first saw the new *Neptune* in England in 1777, but he made no complimentary reference to it in his letters to D'Après, expressing only concern, and then impatience, to see the subsequent corrections D'Après was making.¹²⁴ The 1775 edition of *Le Neptune Oriental*, though all the charts were re-compiled and new plates engraved, was not so great an advance on D'Après' knowledge of 1745 as Dalrymple had expected.¹²⁵ His reaction was a measured one in the proposal he was to put to the East India Company in January 1779:

Notwithstanding the many years that the Europeans have navigated to India, there is not hitherto in any language what may be termed a tolerable set of Charts for all parts of this very important navigation. M. d'Après has done much, but much still remains to be done.¹²⁶

Dalrymple had by now begun to plan a series of coastal charts of his own, based on the network of places whose co-ordinates were accurately fixed, and using the track charts and journals of East India Company ships, regulated by chronometers, to supply information for the intervening coastline, shoals and soundings. He saw that, given the propensity of East India Company captains to record soundings and dangers noticed, the data-collecting exercise of 1778 could also serve another purpose. Coherent series of tracks, referable to each other and to common geographical coordinates, for the area of each chart, as a basis for chart compilation, would be a distinct improvement on the collection of disparate and uncontrolled sources Dalrymple had tried to work with for the Philippines. Observations of such quality would have solved many of his current problems with the Carimata Passage chart.

In October 1778 he was already at work compiling a chart of the coast of Brazil, using older Dutch charts as a basis for entering series of observations and soundings from East India Company ships.¹²⁷ From there it was only a short step to a formal proposal to the East India Company that he should compile and publish their charts officially.

NOTES TO CHAPTER 3: 'AN ACCEPTABLE SERVICE TO THE PUBLICK'

* 'I have thought it would be an acceptable service to the Publick to engrave the plans, in my Collection, of Bays Harbours &c. in the East-Indies, as it is often of the utmost benefit, and always very satisfactory to Navigators to be possessed of particular plans of the Places whereto they may be carried, by chance or accident, as well in as out of the common and accustomed tracks.' (*Proposals for engraving by Subscription sundry Plans of Ports &c. in the East Indies 1773* (16 August issue), p. 1).

¹ *General Introduction to the Charts and Memoirs 1772*, pp. viii-xi.

² Dalrymple to D'Après de Manneville, 8 September 1772 (Paris, Archives Nationales [AN]: Marine 3JJ 340(7)): 'The Chart of the Bay of Bengal has engaged more of my time & attention than I expected & has prevented me from doing any thing for some months past to the Charts which I intend to lay down from my own observations.'

³ *A Collection of Voyages chiefly in the Southern Atlantick Ocean 1775*, pp. 2-8. Dalrymple succeeded, on 13 August, in obtaining an interview with North: 'I attended him according to his appointment; but he then talked much more about Balambangan than the matter concerning which I waited on him; He said He could not give any reply on the subject without consulting His Majesty's other Ministers, and I have never heard any more of the matter.' This, though Dalrymple may have failed to realise it, was likely a North negative: 'It was the etiquette of the Minister, if he could not grant the favour asked of him, at least to send home the person refused in good humour. ... he thought it right to explain, that, when he only nodded, or squeezed the hand, or did not absolutely promise, he always meant No.' (North, in a report of Parliament in *London Evening Post*, 25 February 1772, quoted by Peter D.G. Thomas, *Lord North* (London, 1976), pp. 43-44).

⁴ 'Two voyages made in 1698, 1699 and 1700, by Dr. Edmund Halley ...' and 'Extrait du Voyage fait aux Terres Australes, les années 1738 & 1739, par Mr. des Loziers Bouvet ...', in *A Collection of Voyages chiefly in the Southern Atlantick Ocean 1775*, paginated separately. The title-page for the Halley voyages has a 1773 imprint date, but there is no evidence that it was published separately before 1775. In his letter of 10 July 1772 (AN: Marine 3JJ 340(7)), Dalrymple asked D'Après to get Bouvet's journal printed in France, to bind with Halley's. He required 750 copies, and the consignment arrived in London sometime before 30 April 1773, when Dalrymple acknowledged its receipt (AN: Marine 3JJ 341(12)).

⁵ *General Introduction to the Charts and Memoirs 1772*, pp. viii-x; Dalrymple to D'Après, 3 September 1771 (AN: Marine 3JJ 340(7)): 'I am now engaged in compleating the Charts of my own voyages thro' the Philipinas and other parts of the Eastern Islands; ...'.

⁶ Dalrymple to D'Après, 27 February 1770 (AN: Marine 3JJ 340(5)): 'I have myself passed along the No. Coast of Magindanao or Mindanao, along the Wn. Coast of Paragua, ... along the W. Coast of Mindoro, Pany & Negros three times, thro the Cuyos once; & once between Pany & Negros & thence to the Eastward of Sibuyan into the common track of the Galleons to the South of Marinduque & along the Coast of Luzon.' Dalrymple increasingly came to regard this catalogue of passages as showing the limit, rather than the extent, of his knowledge: '... having

never passed the Embocadero, I have no Views and very few Observations concerning that part' (Dalrymple to D'Après, 12 July 1774 (AN: Marine 3JJ 341(13))). For his caution in using Spanish sources see, for example, his reservations about Faveau's chart of Palawan (Dalrymple to D'Après, 28 February 1769 and 8 March 1769 (AN: Marine 3JJ 340(4))). In 1774 he was to resume searching for charts to corroborate texts by Correa and Gil which he had earlier seen in the Philippines (*Plans of Ports &c. in the East Indies* 3 1774, introduction, pp. 2-4; *A Collection of Plans of Ports &c. in the East Indies* 1775, introduction, pp. 16-17).

⁷ Dalrymple to D'Après, 31 January 1769, 4 April 1769 ('Observations from Manila to the Celebes'), and 11 July 1769 (AN: Marine 3JJ 340(4)).

⁸ Dalrymple to D'Après, 27 February 1770 (AN: Marine 3JJ 340(5)): '... if you can afford me any materials for this Coast I shall be much indebted to you.'

⁹ Dalrymple to D'Après, 27 February 1770 (AN: Marine 3JJ 340(5)): 'I cannot finish it till my Chart of the Coast of China is compleated as well as that of Cochin China. I wish for any helps you can afford me of the Island Hainan and Cochin China both which I have myself visited.'

¹⁰ Dalrymple to D'Après, 11 August 1772 (AN: Marine 3JJ 340(7)): 'I shall be much obliged to You for the pieces you have concerning Cochin-China & Tsiompa; when the Bengal Chart is finished I intend to lay down the Coast from my observations but shall be glad of whatever assistance I can procure.'

¹¹ Dalrymple to D'Après, 8 September 1772 (AN: Marine 3JJ 340(7)). No mention is made of these chart compilation projects in correspondence in 1773 or early 1774 (AN: Marine 3JJ 340(12-13)).

¹² *General Introduction to the Charts and Memoirs* 1772, p. xi.

¹³ See Chapter 1, p. 19, for the sequence and dates of Dalrymple's voyages. James Rennell's journal of the *London* voyage (London, British Library [BL]: Add. MS. 19299) records the return to Pulicat in 1763.

¹⁴ There was no stipulation for the preservation of journals of India-based 'country' ships, in the way laid down for East Indiamen making return journeys outward from London. Dalrymple complained of this gap in knowledge in the context of the Laccadive Islands: '... the Company's Ships seldom pass thro them & the Journals of the trading ships in India are not preserved in any Publick Office' (Dalrymple to D'Après, 2 July 1772 (AN: Marine 3JJ 340(7))).

¹⁵ See Chapter 2, pp. 58-59. Dalrymple essayed a chart of part of the coast of Orissa in 1772, to check with D'Après the position of Codgone (Dalrymple to D'Après, 10 July 1772 (AN: Marine 3JJ 340(7))).

¹⁶ London, India Office Records [IOR]: X/3620/1-10.

¹⁷ Sent in *Lapwing* leaving Bengal 18 November 1772, and marked on receipt in London 17 April 1773 (A.S. Cook, 'Major James Rennell and A Bengal Atlas (1780 and 1781)', *India Office Library & Records Report for the year 1976* (London, 1978), p. 13, n. 47).

¹⁸ Dalrymple to D'Après, 22 June 1773 (AN: Marine 3JJ 341(12)).

¹⁹ See Catalogue B203 810104 Sambeelan Islands and B307 820829a Camorta.

²⁰ *An Hydrographical Journal of a Cursory Survey of the Coasts and Islands in the Bay of Bengal* 1784 (Catalogue A93). For the charts see the list in *Collection of Nautical Papers concerning the Bay of Bengal* 1785 (Catalogue A94).

²¹ John Hawkesworth, *An Account of the Voyages ... for making Discoveries in the Southern Hemisphere*, 3 vols. (London, 1773). Dalrymple's contributions were *A Letter from Mr. Dalrymple to Dr. Hawkesworth* 1773 (Catalogue A27) and *Mr. Dalrymple's Observations on Dr. Hawkesworth's Preface to the Second Edition* 1773 (Catalogue A29).

²² The letters of 22 June and 16 and 20 July (AN: Marine 3JJ 341(12)) do not hint at a new project.

²³ See Catalogue A28. The only copy known of the 16 August version of the *Proposals* is in the Archives Nationales in Paris, having been sent (severely cropped) by Dalrymple to D'Après de Manneville in his letter of 31 August (AN: Marine 3JJ 341(12)). More common is the 14 December version issued in the first number of *Plans of Ports in the East Indies* 1774 (Catalogue A35).

²⁴ *General Introduction to the Charts and Memoirs* 1772, pp. xi-xl. The list included the contents of Dalrymple's copy of J. Van Keulen, *De Nieuwe Groote Lichtende Zee-Fakkel, Het Sesde Deel* (Amsterdam, 1753). The majority of Dalrymple's collection were of English origin, but many came from Dutch sources (chiefly of Cape of Good Hope, Ceylon, Japan, Sumatra, Java and the Eastern Islands, from French sources (chiefly of Madagascar and Mauritius), and from Spanish collections which he had seen in Manila (of the Philippines, including Mindanao and Palawan). Some were ascribed to Portuguese, Danish and Swedish sources, and about 15% were of 'unknown' origin.

²⁵ For examples of manuscript copying of charts and plans, see copies originally enclosed by Dalrymple in letters to D'Après (AN: Marine 6JJ 63(144-169)). A surviving fragment of Dalrymple's own manuscript chart and plan collection, for part of South America, survives in New York Public Library Map Division, in an album volume the prime significance of which has been partly obscured by the later addition of printed charts by James Horsburgh. Many of the manuscript plans in this volume are office copies from loaned originals. The Howe Collection in the British Library (BL: Add. MS. 38076) includes many manuscript copies by Dalrymple of charts known to have been in his own collection.

²⁶ *Proposals for engraving by Subscription sundry Plans of Ports, &c. in the East Indies* 1773 (16 August issue), p. 2.

²⁷ James Swithin, *This Chart of the Particular Part where the Ship Griffin was Lost ... and the Track to Zolo*, [c1765]: copy at BL: Maps 141.a.1.(71.). James Swithin, *The Orthography of the Passage from Cape Boliano, through the Streights of Sapy* (London, 1762): Dalrymple's copy at BL: 793.k.15.

²⁸ H.T. Fry, *Alexander Dalrymple (1737-1808) and the Expansion of British Trade* (London, 1970), p. 30.

²⁹ Catalogue B15 701130 Sooloo.

³⁰ Dalrymple's comments on Swithin's topographical observations, in his interleaved copy of Swithin's pamphlet (see note 27 above), were caustic. To D'Après he wrote: 'Mr. Swithin's Charts have been published but so far are they from exact that I have never seen any thing (not even from the Dutch) so erroneous. This is my reason for not sending a Copy of them. None of the Ships in that passage had an Opportunity of making an exact Chart but the Common Log of any Ship would enable a Person who was never there to make a better Plan than Mr. Swithins. The following Example will I presume be sufficient to convince you. The Road at Sooloo where we lay is on the NW, which he describes to be on the West side of the Island and some Islands before it which bear rom NbE to NW He lays down from WNW to WSW. He did not expect any one would have been able to have detected him but as our Ships have since passed that way and taken Notice of his Blunders I am informed he pretends they are the Errors of his Engraver, the Excuse were it possible to be true would condemn his Charts equally with a Mistake of his own, altho he has published them as Surveys.' (8 March 1768 (AN: Marine 3JJ 340(3))). On 24 December 1768 he replied to D'Après: 'If you wish to have Copys of Mr Swithin's Charts I will send them to you but they are in my opinion worse than useless' (AN: Marine 3JJ 340(3)).

³¹ He was particularly critical of 'the Plan of the Bashee Islands in Dampier's voyages' (*Proposals for engraving by Subscription sundry Plans of Ports, &c. in the East Indies* 1773 (16 August issue), p. 2), though he later diluted the criticism with the acknowledgement that the manuscript source had been merely a sketch (*Proposals for engraving by Subscription sundry Plans of Ports, &c. in the East Indies* 1773 (14 December issue), pp. 1-2).

³² *Proposals for engraving by Subscription sundry Plans of Ports, &c. in the East Indies* 1773, p. 2.

³³ J. B. N.-D. D'Après de Manneville, *Le Neptune Oriental ou routier general des côtes des Indes Orientales et de la Chine ...* (Paris, 1745).

³⁴ W. Herbert, *A New Directory for the East Indies* (London, 1758). Second and third editions appeared in 1759 and 1767.

³⁵ Dalrymple to D'Après de Manneville, 12 February 1767 (AN: Marine 3JJ 340(3)): 'I have heard you intend to publish a new edition of the Neptune Oriental with many improvements to the Chart of the China Seas.'

³⁶ East India Company Court Minutes, 30 November and 30 December 1768 (IOR: B/84, pp. 322 and 370); Dalrymple to Court of Directors, 28 December 1768 (East India Company, Miscellaneous Letters Received, 1768 (IOR: E/1/51, pp. 176-176)). Dalrymple reported his progress to D'Après in letters of 24 December 1768 and 31 January 1769 (AN: Marine 3JJ 340(3-4)).

³⁷ Dalrymple acknowledged this is his letter of 27 February 1770 (AN: Marine 3JJ 340(5)).

³⁸ Dalrymple to D'Après, 16 July 1773 (AN: Marine 3JJ 341(12)).

³⁹ Dalrymple to D'Après, 10 December 1773 (AN: Marine 3JJ 341(12)).

⁴⁰ Dalrymple to D'Après, 31 August 1773 (AN: Marine 3JJ 341(12)).

⁴¹ *Proposals for engraving by Subscription sundry Plans of Ports, &c.*

in the East Indies 1773 (16 August issue), p. 2; (14 December issue), pp. 1-2.

⁴² This first list was written by Dalrymple on the blank final page of the copy of *Proposals* which he sent to D'Après in his letter of 31 August 1773 (AN: Marine 3JJ 341(12)). On the subscription register form (*Proposals*, pp. 5-7), he had entered in manuscript the East India Company's subscription of £105 for 100 copies (East India Company Court Minutes, 18 August 1773 (IOR: B/89, p. 359)). For the published plans see Catalogue B38 740205a Algoa, B49 740205l Mossell Bay, B41 740205d Flesh Bay [Bay St. Bras], B55 740205r Tollear Bay, B45 740205h Manumbagh, B46 740205i Mayotta, B57 740205t Zutphen Islands, B47 740205j Mew Bay, and B51 740205n Po Pinang. The other three were not published until much later, and Siak River not for thirty years: see Catalogue B203 810104 Sambeelan Islands, B290 820410b River New Matheleage [Mahavavy] and B1062 060531g Siacca.

⁴³ *Proposals for engraving by Subscription sundry Plans of Ports, &c. in the East Indies* 1773 (16 August issue), p. 1.

⁴⁴ *Proposals for engraving by Subscription sundry Plans of Ports, &c. in the East Indies* 1773 (16 August issue), p. 3 ('Conditions').

⁴⁵ East India Company Court Minutes, 17 December 1773 (IOR: B/89, p. 632): 'Letter from Mr. Alexander Dalrymple specifying that he has thought it necessary to make some Alterations in the proposals for printing the Plans of Ports &c. in the East Indies and desiring to be paid the Sum the Court agreed to subscribe towards that Work.'

⁴⁶ Dalrymple to D'Après de Manneville, 10 January 1774 (AN: Marine 3JJ 341(13)).

⁴⁷ *Plans of Ports &c. in the East Indies 1* 1774 (Catalogue A35). Dalrymple sent D'Après a copy on 18 February 1774 (AN: Marine 3JJ 341(13)), though he explained that 'la plupart des planches, comme vous le verrez, ne sont point encore finies' (only the translation of this letter survives). The copy of the letterpress, in its original paper covers and inscribed by Dalrymple to D'Après, is at AN: Marine 6JJ 63(160). Three incomplete sets of the plans for this number survive dispersed in the collection of Dalrymple plans at AN: Marine 6JJ 63. Two of these groups comprise impressions from the published states of the plates: the other is a small group of proof impressions from pre-publication states of nine of the plates. It may have been these nine, perhaps among others 'point encore finies', which Dalrymple sent on 18 February: in no earlier letter does he mention sending printed plans, nor is there any obvious gap in the surviving correspondence.

⁴⁸ East India Company Court Minutes, 11 February 1774 (IOR: B/89, p. 772). For the Anjouan and Comoro plans, see Catalogue B42 740205e Johanna and B40 740205c Comoro.

⁴⁹ *Plans of Ports &c. in the East Indies 2* 1774 (Catalogue A36). On 22 April Dalrymple promised to send D'Après a copy 'in a few days' (AN: Marine 3JJ 341(13)).

⁵⁰ *Plans of Ports 2*, pp. 36-78 ('Com. John Watson in Ship Revenge, 1762') and 78-88 ('Instructions for the S W Coast of Sumatra'). For plans from Watson's information see Catalogue B63 740225e Croee, B68 740225j Nattal and B72 740225n Priaman.

⁵¹ *Plans of Ports 2*, pp. 89-128. For plans from Whiteway's voyage see Catalogue B67 740225i I Good Fortune, B74 740225p Secockup, B75 740225q Se Laubo Laubo, B76 740225r So Pogy Island and B78 740425a Hurlock's Bay. For Wahlfeldt's plans see Catalogue B60 740225b Bencoonat Bay, B61 740225c Billimbing Bay, B62 740225d Cawoor, B64 740225f Engano Bay and B65 740225g Engano Island.

⁵² *An Historical Relation of the several Expeditions from Fort Marlborough to the Islands adjacent to the West-Coast of Sumatra 1775*: second edition 1782 (Catalogue A74). This was issued as a 'seperate Tract' in 1782, reprinted, with new imposition and pagination, from the standing type of the 1782 second edition of *A Collection of Plans of Ports &c. in the East Indies 1775*. In this form it has a new preliminary 'Advertisement'. 'Second Edition' on the title page means simply a reprint from the second edition of *A Collection of Plans of Ports*. Only one example of this separate reprint is so far known, in William Marsden's collection: no evidence has so far been found of any separately-issued *A Historical Relation* from the typesetting shared by *Plans of Ports 2 1774* and the first (1775) edition of *A Collection of Plans of Ports*.

⁵³ Catalogue B80 740505a Karak (and see *Plans of Ports 2*, p. [7] ('List of Plates belonging to No. II')). The plan of Keyser's Bay (Catalogue B85 740710c Keyser's Bay) was published in 1775.

⁵⁴ Catalogue B81 740505b Sumatra views. Dalrymple had had, since 1770, authority to inspect the collection of ships' journals deposited in East India House (East India Company, Court Minutes, 28 February 1770, p. 457 (IOR: B/85, p. 457)). On 29 March 1774 he sought to extend this access by asking that 'the Court would give him' (presumably on loan) 'the Duplicate Journals of Ships Voyages' for examination (East India Company, Court Minutes, 30 March 1774 (IOR: B/89, p. 924)).

⁵⁵ *Plans of Ports 2*, p. [8] ('List of M.S.S Plans proposed to be published in the three next Numbers').

⁵⁶ *Plans of Ports in the East Indies 3 1774* (Catalogue A37). For the plans Dalrymple obtained from Galves, see Catalogue B86 740710d Lampon Bay, B87 740710e Palapa, B88 740710f Panguyl, B90 740715a S Miguel de Naga [for plan of Seeseeran], B84 740710b Capa-luan, B91 740715b Sorsogon Harbour and B98 740730b Ylocos [for plan of Salomague].

⁵⁷ *Plans of Ports in the East Indies 4 1774* (Catalogue A39).

⁵⁸ Three of the twelve plans in *Plans of Ports 4* were from East India Company sources (Catalogue B94 740725c Patta, B108 741215 Crotchey Bay and B110 741217 Sandakan). Three plans by Elias Bates from East India House were included in the final instalments 1775 (Catalogue B118 750115c Merjee, B127 750324b Onore and B129 750327 Comptee).

⁵⁹ *Plans of Ports 1 1774*, p. [4]: 'If any person, who is possessed of plans of ports, &c. in the East Indies, or of any explanations relative to the plans in my Collection, will favour me with the communication thereof, it will be thankfully accepted, and a proper use made of it ...'.

⁶⁰ 'Memoirs of Alexander Dalrymple', *The European Magazine and London Review*, 42 (1802), p. 326: 'Alexander Dalrymple was advised, by the then Chairman and Deputy Chairman, to make a specific application, before the arrangement of the Madras Council was made, his former letters being considered as too general.' This is a paraphrase of part of

Dalrymple's memorial *To the Proprietors of East India Stock* of 27 March 1775 (see Catalogue A45).

⁶¹ The Regulating Act of 1773 (13 Geo. III c. 63) intervening between Dalrymple's ambiguous dismissal in 1771 and his application for reinstatement, the procedure of a ballot of stockholders had to be invoked to decide his case (East India Company Legal Adviser, Law Cases and Opinions: 'Mr. Sayer's Opinion on Mr. Dalrymple's Case', 9 March 1775 (IOR: L/L/7/204, ff. 12-14)). In his memorial *To the Proprietors of East India Stock* 1775 Dalrymple demonstrated (p. 3) that he had the backing of fourteen of the Directors for his interpretation that he had been dismissed only from the Balambangan expedition. It required a further decision of the Court of Directors to restore him to the Madras standing which his seniority entitled him (East India Company, Court Minutes, 3, 10 and 21 March, and 6, 7, 10 and 11 April 1775 (IOR: B/90, pp. 470, 486, 505-506, 540-542, 544-546 and 548)).

⁶² See Catalogue A42 and A43. For a discussion of the make-up of these two last 'numbers' of *Plans of Ports*, see Andrew S. Cook, 'Alexander Dalrymple's *A Collection of Plans of Ports in the East Indies* (1774-1775): A Preliminary Examination', *Imago Mundi* 33 (1981), pp. 46-64, especially pp. 48 and 61, and note 83.

⁶³ See Catalogue B114 750105 Goa Harbour, B116 750115a Choul, B118 750115c Merjee [Bates], B122 750225 Broach Bar, B124 750317 Cranganor, B126 750324a Gariah Harbour, B127 750324b Onore [Bates] and B129 750327 Comptee [Bates].

⁶⁴ See Catalogue B38 740205a Algoa, B41 740205d Flesh Bay, B49 740205l Mossell Bay, B53 740205p Socotra and B55 740205r Tollear Bay. See Chapter 7, p. 220, and Cook, 'Alexander Dalrymple's *A Collection of Plans of Ports*', pp. 51-58, for a discussion of the re-engraving of these plans for re-issue of these plans to subscribers.

⁶⁵ Apart from the re-engraving with stone on the five re-issued plates (see note 72 above), two further plates had the stone engraving re-entered without formal re-issue of the plans: see Catalogue B52 740205o Rydangh and B63 740225e Croee. Small changes, chiefly to titles, notes, place-name spellings, engravers' imprints, hills and other topographical features were made to other plans: see Catalogue B68 740225j Nattal, B77 740225s Tappanooley, B80 740505a Karak, B82 740630 Gingerah, B93 740725b Dalawan, B94 740725c Patta, B98 740730b Ylocos, B100 740810a Bongo Bay, B103 741001a Tonqueen Bar, B104 741001b Yu-lin-kan Bay, B107 741125a Negrais Harbour, and B108 741215a Crotchey Bay. Post-publication alterations such as these are distinct from the changes made to proof copies before publication. Extra proof copies were sometimes incorporated unintentionally in sets for issue (see note 66 below). In the letterpress, twelve addenda pages were added to 'An Historical Relation of the several Expeditions from Fort Marlborough ...' between pages 104 and 105, to incorporate a report previously thought lost, and pages 133-148 were re-set to improve the sense and to include a short account of Yu-lin-kan Bay previously issued only in an ephemeral preliminary section.

⁶⁶ 'I printed only 250 copies [of the letterpress], 100 of which are for the East-India Company, 50 to be distributed amongst my Freinds & the remaining 100 only, for Sale' (Dalrymple to D'Après, 22 April 1774, declining the latter's offer to set up a subscription system in France to reciprocate Dalrymple's publicity for *Le Neptune Oriental* in England

(AN: Marine 3JJ 341(13))). Dalrymple had few extra sets of plans on hand in April 1775 (see note 67 below), though he entered into an arrangement with Henry Gregory either before April 1775 or in 1777 whereby he supplied sufficient complete sets of plans for Gregory to issue an augmented fourth edition of *New Directory for the East Indies* in 1776 or 1777 with a new contents page incorporating Dalrymple's plans (see, for example, BL: 7.TAB.113, and IOR: X/19501). Stock deficiencies in the supply to Gregory seem sometimes to have been made up by the inclusion of proof copies.

⁶⁷ List of 'Books left with J. Nourse, by Alex. Dalrymple, Esq.', 22 April 1775 (London: Royal Astronomical Society [RAS], Add. MS. 5.13).

⁶⁸ RAS: Add. MS. 5.27.

⁶⁹ *A Collection of Plans of Ports &c. in the East Indies* 1775, introduction, p. 1.

⁷⁰ East India Company, Court Minutes, 17 and 22 March 1774 (IOR: B/89, pp. 880 and 890).

⁷¹ East India Company, Court Minutes, 22 June 1774 (IOR: B/90, p. 105).

⁷² East India Company, Court Minutes, 13 July 1774 (IOR: B/90, p. 132).

⁷³ Dalrymple to D'Après, 21 June 1774: 'I have in view to engrave a Chart of the Carimata Passage and the Islands of Teoman, Anambas, Natunas &ca. from all the Remarks of our different Ships which have passed there ...' (AN: Marine 3JJ 341(13)).

⁷⁴ Dalrymple to D'Après, 12 July 1774: 'I am at present engaged in completing the Charts mentioned in the enclosed paper: my own Views of the Lands amongst the Philipinas are very numerous and very general, but having never passed the Embocadero, I have no Views and very few Observations concerning that part: If M. Croizet's Voyage contains any I flatter myself You will oblige me with them.' (AN: Marine 3JJ 341(13)). The 'enclosed paper' may have embodied a modification of Dalrymple's 1772 plan (see page 70 above).

⁷⁵ Dalrymple to D'Après, 25 November 1774 (AN: Marine 3JJ 341(13)). For the chart of northern Borneo and the Sulu Islands, see Catalogue B13 691020b Borneo. This was first published as a map, with land topography but without soundings, to illustrate Dalrymple's Balambangan proposals of 1769 (see chapter 2, p. 52 above).

⁷⁶ *Plans of Ports in the East Indies* 3 1774, introduction, p. 4.

⁷⁷ Dalrymple to D'Après, 12 July 1774 (AN: Marine 3JJ 341(13)).

⁷⁸ Manuel Correa, *Descripcion segura y verdadera, en forma de derrotero de las costas, puertos, islas, y baxos, con las fondas y señales desde el puerto ó ensenada de Mariveles, hasta mas allá del Cabo de Engaño; juntamente con la de las islas de Babuyanes* [Edinburgh, 1773] (see Catalogue A31). For Dalrymple's acquisition of this text, see *Plans of Ports in the East Indies* 3 1774, introduction, p. 4, and *A Collection of Plans of Ports &c. in the East Indies* 1775, introduction, p. 17. He later published Sir Hyde Parker's translation of Correa's text: *An Exact and True Description of the Coasts, Ports, Islands and Shoals ... of Luzon* 1789 (see Catalogue A165), and second edition 1808 (see Catalogue A249).

⁷⁹ Don Antonio Perez Gil, *Derrota del Puerto de Cavite al Embocadero de San Bernardino, y de este al de Cavite* [Edinburgh, 1773]; and a text without title, headed 'MS. A.' and beginning 'De Romblon a la punta de Bulcave ...' [Edinburgh, 1773] (see Catalogue A32 and A33). Dalrymple recorded his acquisition in *A Collection of Plans of Ports in the East Indies* 1775, introduction, p. 17: 'I received from Galves some M.S.S. Instructions of [Don Antonio] Gil which I have printed for publication.' These two texts, with the *Correa Descripcion*, Dalrymple sent to Edinburgh to be printed by Murray and Cochrane. Dalrymple used the same firm to print the 'Arias Memorial' (see Catalogue A30) and 'Extrait d'un Journal de Navigation pour un Voyage de la Mer du Sud, fait par le S. Ducloz Guyot de St Malo, dans le vaisseau Espagnol Le Lyon, en 1753' (one of the sections of *A Collection of Voyages chiefly in the Southern Atlantick Ocean* 1775: see Catalogue A45) in 1773 under the supervision of his brother James. For Dalrymple's preference for using Murray and Cochrane to print French and Spanish texts, see Chapter 7, p. 230.

⁸⁰ He had been questioning D'Après in 1770 and 1771: 'I have a circumstantial Description of the W. & No. Coast of Luzon but it refers to a Chart of this Coast by Corea which Chart I have not been able to procure.' (Dalrymple to D'Après, 27 February 1770: (AN: Marine 3JJ 340(5))); 'I am sorry you have not got the Chart of the W & N Coasts of Luzon from Manila to C. Engaño made by Corea, as his Derrotero (which I have without the Chart) is very circumstantial &, I believe, exact.' (Dalrymple to D'Après, 3 September 1771 (AN: Marine 3JJ 340(6))). By August 1774 he had accepted that 'It is most likely both This [Correa's] and Gil's Plans remain in the Archives of Spain' (*Plans of Ports in the East Indies* 4 1774, introduction, p. 4).

⁸¹ Catalogue A69 and A196.

⁸² See note 73 above.

⁸³ Catalogue B187 800600 Carimata Passage.

⁸⁴ Catalogue B13 691020b Borneo, state 2. As a published map from *A Collection of Charts and Memoirs* 1772, this chart, alone of those connected with this exercise, continued to be reprinted throughout Dalrymple's life and impressions from this and subsequent states of the plate are regularly found in collections of Dalrymple's published charts.

⁸⁵ Catalogue B111 750000a Panay.

⁸⁶ Catalogue B249 810924 Luzon.

⁸⁷ Catalogue B115 750106 Panay, B131 750405 Philipinas and B133 750414 Cuyos. Examples of each are known in the collections of the Hydrographic Office, Taunton, and in Sir Francis Beaufort's collection in the Library of Congress, Washington, D.C.

⁸⁸ Catalogue B119 750120 Balabac.

⁸⁹ Catalogue B134 750419 London views, B229 810625 Strait of Sapy views, B237 810801c Mindoro views, B240 810819 Celebes views, B241 810821 Surigao Passage views, B246 810911 Panay views, B250 810924b Negros views, B251 810927 Batanes views, B252 811011 Luzon views, B254 811019b Borneo views, B257 811107a Celebes views 1-15, B258 811107b Celebes views 16-29, B264 811121 Natunas views, B327 830117 Borneo views, B335 830219c Philipinas views, and B345 831001b Philipinas views.

⁹⁰ Catalogue B229 810625 Strait of Sapy views. See Catalogue A196 for the *Journal*.

⁹¹ The views plates are chiefly known from their publication as Admiralty charts after Dalrymple's death (see Chapter 6, p. 207).

⁹² See note 61 above.

⁹³ East India Company Court Minutes, 14 April 1775: 'Order'd That he be permitted to take with him to Fort St. George the Chief and Second Mates Journals of the several Ships mentioned in a Paper accompanying his Request in order to enable him to compleat some Charts of the Eastern Navigation on his giving a Receipt to return the same when done with' (IOR: B/91, p. 5).

⁹⁴ Catalogue B131 750405 Philipinas and B133 750414 Cuyos. 750419 London views (Catalogue B134) was completed at the same time, as was 750413 St Mary's (Catalogue B132), too late for *A Collection of Plans of Ports &c. in the East Indies* 1775 and eventually issued in 1780. Dalrymple embarked in *Grenville* at Spithead at 2 p.m. on 24 April (East India Company Marine Records, Journal of *Grenville*, 24 April 1775 (IOR: L/MAR/B/467D)).

⁹⁵ Benjamin Henry appears, with Dalrymple's manservant Pedro Manuel, in the list of servants given free passage to Madras in the *Grenville* as Pigot's household staff (East India Company, Court Minutes, 12 April 1775 (IOR: B/90, p. 550)). Henry took views of land in the Azores and Canaries, ashore at Cape of Good Hope, and on approaching Fort St. George. These Dalrymple later published: Catalogue B158 791001 *Grenville* views, B151 790728c *Grenville* views, and B167 791210 Fort St. George views. While in Madras Henry drew a series of landscape views which he later engraved in England for publication in 1778 (780915a-780915e (Catalogue B136-B140)).

⁹⁶ The voyage to India gave Dalrymple new materials to work with. In February 1776 he sent D'Après a plan of False Bay and was promising a copy of his journal: 'I have been so little time at this Place and so much engaged since my arrival that I have not had leisure to examine the Copy I had got made of my Journal with an intention of sending to You' (Dalrymple to D'Après, 26 February 1776 (AN: Marine 3JJ 341(14))). Though Dalrymple was in India only from 9 December 1775 to 11 October 1776, he was also involved in supervising Barnard's map of the Jaghir (published as Catalogue B143 790301 Choromandel), and with surveys in Madras itself (H.D. Love, *Vestiges of Old Madras 1640-1800*, 3 vols. and index (London, 1913), vol. iii, p. 131).

⁹⁷ In his letter of 25 March 1777 from quarantine at Marseilles he complained that north-westerly winds in the Red Sea had lengthened his passage from Madras to Suez to three months (AN: Marine 3JJ 341(15)). After leaving Alexandria on 30 January he skirted the Turkish coast en route to Marseilles: his outline views of land were later published (see Catalogue B1116 110614 Marmorice). After twenty days quarantine he hastened across France, writing to D'Après again from Calais on 19 April (D'Après to Dalrymple, draft, 28 April 1777 (AN: Marine 3JJ 341(10))). In London in June, he wrote 'I shall remain here at least a month' (Dalrymple to D'Après, 20 June 1777 (AN: Marine 3JJ 341(15))), implying nevertheless a short interval of time.

⁹⁸ Dalrymple's last published contribution to the argument in 1777 was

his *Letter to the Court of Directors* of 19 June (Catalogue A53). He ceased to be mentioned in this connection in Court Minutes after 1 October when he received his expenses in travelling overland from Madras (IOR: B/93, p. 320).

⁹⁹ Dalrymple to D'Après, 31 October 1777 (AN: Marine 3JJ 341(15)).

¹⁰⁰ The Court resolution recalling Dalrymple and others was approved by ballot on 9 May 1777 (East India Company, Court Minutes, 9 May 1777 (IOR: B/93, pp. 77-80).

¹⁰¹ 'I shall not return at present to India but intend to spend a few Months in France' (Dalrymple to D'Après, 15 July 1777 (AN: Marine 3JJ 341(15))).

¹⁰² 'All my Charts & Memoirs of the Moluccas remain at Madras' (Dalrymple to D'Après, 20 June 1777 (AN: Marine 3JJ 341(15))), in answer to D'Après' request of 28 April for such materials (AN: Marine 3JJ 341(10)); 'Not having any of my Charts & Memoirs with me I cannot presume to offer particular remarks on the Chart You have been so obliging to send me' (Dalrymple to D'Après, 15 July 1777 (AN: Marine 3JJ 341(15))).

¹⁰³ Dalrymple to D'Après, 31 October 1778 (AN: Marine 3JJ 341(16)).

¹⁰⁴ Dalrymple to D'Après, 16 June 1778: '... none of my papers are yet arrived from India ...', and 6 October 1778: 'Not having yet received my papers from India it is not in my power to give You that information I wished ...' (AN: Marine 3JJ 341(16)).

¹⁰⁵ Dalrymple to D'Après, 26/29 December 1778 (AN: Marine 3JJ 341(16)).

¹⁰⁶ 'The East India Company have sent orders to Madrass that all my Books, Charts, Papers &c. be sent home in the first Ship dispatched from thence' (Dalrymple to D'Après, 10 June 1779 (AN: Marine 3JJ 341(19))). See also chapter 4, note 93.

¹⁰⁷ See note 89 above for a list. As these plates went unpublished until after Dalrymple's death, and as only a proportion of Dalrymple's copper plates then came into Admiralty hands, the completeness of this group is attested only by the presence of proof copies, dating from *circa* 1781, in the British Library: Maps 147.e.17.

¹⁰⁸ Catalogue B106 741125a Ivanna and B109 741215b Musa Bay.

¹⁰⁹ Catalogue B253 811019a Anamba Islands, B255 811020 Natunas Islands and B264 811217c Natunas Islands.

¹¹⁰ *General Introduction to a Collection of Plans of Ports &c. in the Indian Navigation* 1783, p. 16.

¹¹¹ Catalogue B327 830117 Borneo views, B335 830219c Philipinas views, and B345 831001b Philipinas views.

¹¹² There is no mention in the correspondence which Dalrymple initiated in September 1783 with Claret de Fleurieu, successor to D'Après' collection on its transfer to the Dépôt des Cartes et Plans de la Marine (Paris, Bibliothèque de l'Institut de France [BIF]: Institut MS.2325 (NS cccxxv), 16-28)).

¹¹³ Catalogue B842 971101 Cochin China. Only one example is known of this chart, sent back to the War Office in London after use by the

Royal Engineers in Mauritius in 1873 (London, Public Record Office: WO.78/114). Dalrymple later published routinely the southward continuation of his *Cuddalore* chart: Catalogue B934 020307 Cochin China.

114 Catalogue B962 030403 Cochin China views 1, B963 030404 Cochin China views 2, B782 950510 Cochin China views 3, and B966 030429 Cochin China views 4. Other plans appeared in the regular East India Company series at about this time: Catalogue B892 000403a Cochin China, B893 000403b Coumong, B894 000405 Xum Day, and B899 000418b River Cey Gon.

115 Fry, *Alexander Dalrymple*, chapter vii, and sources indicated there.

116 Dalrymple recorded this in *Longitude: A Full Answer to the Advertisement concerning Mr. Earnshaw's Timekeeper* 1806, p. 35. For the first uses of chronometers at sea, see W.E. May, *How the Chronometer went to Sea*, reprinted from *Antiquarian Horology* (March 1976), pp. 638-664. For marine chronometers generally, and Arnold's in particular, see R.T. Gould, *The Marine Chronometer: Its History and Development* (London, 1923), and Vaudrey Mercer, *John Arnold And Son* (London, 1972). For the details of Dalrymple's involvement with Arnold's chronometers, see Andrew S. Cook, 'Alexander Dalrymple and John Arnold: Chronometers and the Representation of Longitude on East India Company Charts', *Vistas in Astronomy*, 28 (1985), pp. 189-195. May's assertion (p. 641) that 'It is probable that the first East Indiaman to carry a chronometer was the *Grenville*' is significantly at variance with Dalrymple's statement (*Longitude*, p. 35) that Pigot's chronometer 'had made a journey to India before that time'.

117 *Journal of a Voyage to The East Indies, in the Ship Grenville* 1778 (Catalogue A57), first published in *Philosophical Transactions of the Royal Society*, 68 (1778), pp. 389-418.

118 *Longitude: A Full Answer*, p. 69. Some of Dalrymple's observations in *Swallow* were published at the end of *Journal of a Voyage to the East Indies*, p. 418.

119 Cook, 'Alexander Dalrymple and John Arnold', p. 190, nn. 20-21. Dalrymple introduced a 'Major Wood' to Arnold on 8 May 1778, and in June 1779 permitted Mrs. Arnold to satisfy (temporarily) John Arnold's obligation to Governor Johnstone by lending the chronometer which he (Dalrymple) had had made 'on the same construction' (*An Answer from John Arnold to an Anonymous Letter on the Longitude* 1782 (Catalogue A77), pp. 9-10).

120 Dalrymple to D'Après, 2 December 1777 (AN: Marine 3JJ 341(15)). The diagram of the form is incorporated in the letter sheet.

121 *A Comparison of the several Tracks of the Company's Ships ...* 1778 (Catalogue A54). The only copy known of the January 1778 issue of this pamphlet is in Robert Orme's collection (IOR: MSS. Eur. Orme O.V.88), where it is bound before item 11, though not noticed in S. C. Hill, *Catalogue of Manuscripts in European Languages belonging to the Library of the India Office, volume II, part I: The Orme Collection* (London, 1916).

122 East India Company Court Minutes, 21 January 1778 (IOR: B/93, p. 513).

123 'It was a great disappointment to me not to have received your New

Edition of the Neptune Oriental before I left Europe. I am impatient to see that very valuable Work and hope the first Ships which arrive on the Coast, whether French or English will; bring it to me' (Dalrymple, Madras, to D'Après, 26 February 1776 (AN: Marine 3JJ 341(14))). 'He [Elmsly] sent the Copies of the Nept. Orient. for Lord Pigot and Me by the Ships bound to Madrass but they had not arrived when I left that place' (Dalrymple to D'Après, 15 July 1777 (AN: Marine 3JJ 341(15))).

¹²⁴ 'I ... am extremely solicitous to see the Alterations you have made in the Nept. Oriental' (Dalrymple to D'Après, 20 June 1777 (AN: Marine 3JJ 341(15))); 'I am extremely impatient to see the Additions to the Nept. Orient. You mention' (Dalrymple to D'Après, 15 July 1777 (AN: Marine 3JJ 341(15))). Dalrymple was reacting first to D'Après' letter of 28 April ('J'ai fait un grand nombre de Corrections à mon Neptune depuis que Je l'ai mis au Jour, tant sur vos observations que sur plusieurs autres qui m'ont été envoyées'), and then to the list of twelve 'Changements Considerables' which D'Après notified on 2 July (AN: Marine 3JJ 341(10)). There is no suggestion in the correspondence, of which both sides survive for these few months in 1777, that there was another letter (now lost) which might have included a complimentary reference by Dalrymple to D'Après' 1775 publication.

¹²⁵ A comparison of the series of coastal charts in the 1745 and 1775 editions of *Le Neptune Oriental* suggests no great qualitative improvement beyond re-engraving to a smaller format. Such changes as there were, were not far-reaching enough to cause Gregory and Samuel Dunn, in successive editions of the *New Directory for the East Indies* in 1776, 1780 and 1787, to discard wholesale the English versions of D'Après' 1745 charts which Herbert had originally had engraved for the *New Directory* in 1758 (see Chapter 4, p. 131, below).

¹²⁶ Dalrymple's memorial of 28 January 1779, subsequently printed by him in *A Collection of Plans of Ports in the East Indies* 1775, second edition 1782, introduction, pp. 27-28.

¹²⁷ Dalrymple to D'Après, 6 October 1778: 'I am at present engaged in publishing a Draught of the Coast of Brazil: ... The Chart I have engraved comprehends the whole East Coast from Cape S. Roque to Santos taken from the antient Dutch Charts, (which have the appearance of being Surveys) reduced to one uniform Scale of 3 Inches to 1°. with the addition of the Soundings from the various Journals of our Ships on this Coast; I have not continued the Chart beyond Santos because I have a Chart from Cape Frio to Rio Janeiro amongst my papers in India, but cannot obtain a Copy of that Chart at present ...' (AN: Marine 3JJ 341(16)).

CHAPTER 4

'HIS PARTICULAR OCCUPATION':*

EXAMINING THE SHIPS' JOURNALS AND PUBLISHING CHARTS FOR THE EAST INDIA COMPANY 1779-1795

On 1 April 1779 the East India Company appointed Alexander Dalrymple, their Madras council member under notice of recall, to a new responsibility 'for examining the Ships Journals'. Dalrymple had proposed himself in a memorial of 28 January, which resulted from his developing interest in the collections of geographical and hydrographical materials in East India House.¹ The Court of Directors concurred with the Committee of Correspondence:

They have considered the Proposal of Alexander Dalrymple, Esq; for examining the Ships Journals from the earliest times that Notice may be given of every danger which has hitherto been discovered, and for publishing from time to time such Charts and Nautical Instructions as a Comparison of the various Journals and other Materials may enable him to do, on the Conditions annexed thereto; and submitting as their opinion that such undertaking would be of the utmost utility to the Navigation of the Ships employed in the Company's Service and that Mr. Dalrymple be therefore immediately employed in this Undertaking, and that on delivering in during the Course of 12 Months, a Collection of his Proceedings, he do receive a suitable reward for his trouble, and, on the approbation of his Work, he be employed for completing the Plan proposed, agreeably to the terms which shall be then settled.²

This was a new venture and the Court proceeded cautiously: Dalrymple's employment was specifically for this undertaking for a trial year. The remuneration was not set at first, but the budget for disbursements was fixed at £500.³ When, after a probationary year, Dalrymple's work was approved, his annual remuneration, influenced by his Madras salary, was set at £500. This was no more than the Secretary at Madras was paid, but it equalled the highest London salary, that of the Secretary to the Company itself.⁴ Those supporting his proposal in the Court did not wish to jeopardise it by appearing to create a permanent office at so high a salary.⁵ Nonetheless, the confirmation in 1780 that he would

continue to receive £500 a year while he showed 'the like Industry and Attention'⁶ constituted Dalrymple's formal connection with the Company until his death in 1808. Though he later called himself 'Hydrographer to the East India Company', his position never appeared in the Company establishment or salary books:⁷ he was paid quarterly by Court warrant, and the record of payments in the journal books only ever had the description: 'For examining the Ships' Journals &ca.'⁸

The immediate occasion for Dalrymple's appointment was the loss of the East Indiaman *Colebrooke* on the Anvil Rock in False Bay, Cape of Good Hope, in August 1778.⁹ Dalrymple argued that the danger had been known since the *Caesar* struck in 1745, and was confirmed by the French ship *Mergé* striking subsequently. The French hydrographer D'Aprés de Mannevillette had published the *Mergé's* account in 1765,¹⁰ and Dalrymple was already corresponding privately with D'Aprés in 1767 about the *Caesar's* journal.¹¹ His argument to the Company was that the proper coordination and publication of hydrographical information from the fair copies of the journals routinely deposited in East India House by the captains of returning ships would alert captains on subsequent voyages to particular dangers. He was supported by the Chairman, Sir George Wombwell, whom he reported as remarking that 'the loss of the *Colebrooke* was more than the Expence of such an Office to all Eternity'.¹²

Unlike the French and Dutch East India Companies, the English Company had never established a hydrographical office. The Dutch Company had traditionally organised chart production as a secret central function until the publication of the sixth part of Van Keulen's *De Nieuwe Groote Lichtende Zee-Fakkel* in 1753,¹³ furnishing ships with charts only in manuscript. The chart workshops, in Amsterdam under Joan Blaeu and later in Batavia, produced coastal pilotage charts of the East

Indies in large quantities. Captains and officers accounted for each item on inventories after each voyage, with money penalties for losses.¹⁴ The French Company's hydrographical materials were in the hands of D'Aprés de Manneville at Lorient in Brittany. As the Company's hydrographer he maintained an office independent of the Dépôt des Cartes et Plans de la Marine (founded in 1720) in Paris, until the Company's suppression in 1769. D'Aprés continued his revision of his *Le Neptune Oriental* in Lorient as an autonomous outstation of the Dépôt until his death in 1780, when his collections reverted to the French crown, to be inventoried and transferred to Paris into the care of Fleurieu.¹⁵ D'Aprés had published *Le Neptune Oriental* first in 1745, with a revised edition in 1775 and a *Supplément* published posthumously in 1781.¹⁶

The East India Company in London had no formal mechanism for official chart publication, and exercised looser control over shipping and routes. Typically in the eighteenth century the Company controlled the provision of shipping by regulating the activities of consortia of private shipowners. A ship's equipment, including navigation instruments and charts, though inspected by Company surveyors, was the responsibility of the captain as employee of the owners.¹⁷ The captain's qualifications and experience were subject to ratification by the Company.¹⁸ His responsibility extended to chart supply: the Company did not prescribe what charts were to be carried, only that a fair copy of the journal (usually embodying the daily log) was to be deposited at the conclusion of each voyage. The accumulation of these journals,¹⁹ each with daily observations for position, hourly observations of conditions at sea, notes of land and dangers observed, often hand-drawn coastal profiles, and sometimes plans of harbours, had attracted Dalrymple's interest in the 1760s and 1770s,²⁰ and formed the basis of his 1779 proposal. Despite their wealth of information, no

system of chart compilation, either through examination of these journals or independently, had ever grown up in the Company in London.

Dalrymple had acquired copies of the major printed chart collections by 1772. In the *General Introduction* to his *A Collection of Charts and Memoirs* of that year, he set out 'A List of my Collection of Charts of the East Indies', with a brief evaluation of the contemporary printed atlases:

In the List I do not mention the Charts in the English Wagoner, in Van Keulen, in Cornwall, or in the Neptune Oriental; which are the only printed Collections I know of East Indian Charts.—As the few Plans in Pimentel do not deserve the name of a Collection.²¹

Dalrymple collected editions of the 'English Wagoner' (the popular name for Mount and Page editions of Thornton's *The English Pilot*),²² and owned a copy (later two copies) of the 1675 John Seller edition,²³ though he misunderstood the history of its descent from Seller to Thornton. Dalrymple's copies ended with page 24 (as do the four copies known today), and he said of it in 1783:

... it appears to be the earliest Book of Instructions expressly for the East Indian Navigation: I do not know if there was any subsequent Edition, but it contains many things omitted in Thornton's Collection, and inserted no where else that I know: it will be a favour if any person will point out where a compleat copy can be found: It probably was the Book of Charts in use till the beginning of the present Century, when Thornton's more copious Collection was published.²⁴

The contents of his copy of Van Keulen's *Zee-Fakkel* he listed in detail, aware that copies differed in make-up, but had found no charts or plans not present in his own copy.²⁵ By 1786 he was perplexed that no further editions had followed after 1753.²⁶ Dalrymple considered D'Après de Mannevillette's *Le Neptune Oriental* a standard work: the second edition in 1775 considerably augmented, but did not improve, the series of coastal pilotage charts which formed the core of the 1745 first edition.²⁷ In his 1779 memorial Dalrymple singled out D'Après' charts

for something approaching praise: 'M. D'Aprés has done much, but much still remains to be done.'²⁸

Dalrymple's note of 1772 omitted William Herbert's *New Directory for the East Indies*, of which the third edition had appeared only in 1767,²⁹ as basically a re-issue (in translation) of D'Aprés' 1745 edition, and therefore not necessary for consideration alongside it.³⁰ Herbert sold his business to Henry Gregory shortly before 1775,³¹ and by 1777 Gregory had negotiated with Dalrymple to include impressions of Dalrymple's 1774 and 1775 plans of ports in a re-issue of the 1776 fourth edition of the *New Directory* atlas.³²

Dalrymple included Cornwall's *Observations upon Several Voyages to India*³³ in his list, though it was more a pilot-book with illustrations, chiefly woodcut. Pimentel's *Arte de Navegar* he used in the 1762 Lisbon edition.³⁴ Other general printed collections, such as Bellin's *Petit Atlas Maritime*,³⁵ were omitted from the note presumably as not particular to the East Indies navigation.

With these Dalrymple added a broad acquaintance with the printed collections to his accumulation of manuscript charts and plans of the East Indies, the product of twenty years' collecting and copying from 1759. In 1772 he had described his manuscript collection as:

Nautical Remarks and Charts of various parts of India, collected, sufficient to make a more complete Set of Charts and Sailing Directions than any hitherto published. But to do this would be too great an Undertaking for any man, unless it was his particular occupation;...³⁶

He had already drawn on them, together with materials from his own voyages, for the limited publication of plans of ports in 1774 and 1775, but there remained, from the five hundred he listed in 1772,³⁷ a still largely unexplored resource. Dalrymple had continued to expand his collection through the 1770s, even making additions to it in Madras in

1776.³⁸ His chart collection formed part of the working library which he took to Madras on the *Grenville* in 1775, and which he left there in 1776 during what he intended only as a temporary absence in London as Pigot's representative.³⁹

Dalrymple thus came to his East India Company responsibility in 1779 with a comprehensive awareness of the navigational knowledge of the East Indies possessed by the European powers, and with a history of involvement with chartmaking from his voyages in the Eastern Archipelago in the 1760s. His first step was to compose and issue on 20 April a notice, based on his 28 January memorial, chiefly intended for East India Company ships' commanders and officers, explaining the purpose of his appointment.⁴⁰ He proposed to compile a new set of charts for the navigation to the East Indies, improving on D'Aprés de Manneville's *Le Neptune Oriental* by including the sightings of rocks and shoals recorded in the accumulation of ships' journals in East India House. He saw his first task to examine all the journals and his second to produce charts: he wanted to enlist the help of ships' officers to provide information, correct errors, and guide him to the most useful journals. Dalrymple's first task was a laborious one:

The Plan I propose to pursue is, with the utmost Expedition to get an Index made to all the Journals, containing the day of seeing every Land or shoal, or having Soundings, so that as soon as possible the Company's Ships may have notice of every danger which has been discovered from the earliest times: and thus knowing every Ship which has seen any particular danger, the comparison of the different Journals will facilitate the laying down thereof.⁴¹

By correlating ships' tracks from the journals, and indexing sightings of land and dangers, he expected also to provide recommendations for the best tracks to follow at different seasons. The chief disadvantage in using the old journals was unreliability in their estimation of longitudes by dead reckoning or 'by account', as this resulted in large margins of possible error in positioning reported dangers on large-

scale charts. To make future journals of more use, he advocated the shipboard use of lunar observations or chronometers (as in the *Grenville*) to build up coherent series of observations for latitude and longitude,⁴² and offered a design of journal form for recording the observations he wished to have made.⁴³ He proposed issuing incomplete outline charts to ships to indicate the areas for which he wished to receive observations and reports.⁴⁴

Dalrymple's idea for using lunar observations and chronometers at sea had first appeared in his January 1778 scheme to determine the best courses for outbound and homeward ships, and to investigate the phenomenon of ocean currents.⁴⁵ He linked his scheme and its list of known longitudes with a form of graduated chart for marking a ship's track, and found the Company's Committee of Shipping willing to recommend purchase of 100 copies for issue to that season's ships.⁴⁶ It was the same system of recording which he offered in May 1779 to establish accurately the relative longitudes between known places, and the positions of intervening shoals and dangers, for chart compilation. He revised his 1778 scheme in a new pamphlet in 1779, also aimed primarily at Company commanders and ships' officers:⁴⁷

The East-India Company having thought proper to employ me in the very useful work of examining the Journals of their Ships, for improving the Charts of the Navigation to the East-Indies, it becomes highly expedient to lay down a form, by attention to which, the several Gentlemen in the service will, in future, be enabled to express compleatly and uniformly the Observations which occur in their respective voyages.

The form of journal allowed for daily summaries of distance and course from the ship's log-book, with supplementary columns for recording weather and winds in six-hourly periods and for performing positional calculations from the various noon readings for latitude and longitude by dead reckoning, lunar observation and time-keeper.⁴⁸ His pamphlet

gave instructions for using the journal forms, and a fuller list of established longitudes than was available in January 1778.⁴⁹

As his first output, Dalrymple proposed for 1779 to compile and publish a small-scale chart (60 nautical miles to 1 inch) of the Mozambique Channel and Madagascar, and larger-scale charts of the Strait of Bangka, the Strait of Singapore, and the Parcelar Banks in the Strait of Malacca. The longer-term plan was for a series of twenty-seven coastal charts at a common scale of 20 nautical miles to 1 inch covering the most-frequented coasts of the Indian Ocean and East Indies. Additionally he intended to publish 'particular Charts on larger Scales of such Parts as require a more minute detail' from other sources, and he encouraged his readers to send, loan or show him charts or plans they might have.⁵⁰

The scheme of coastal charts included a group of seven to cover Madagascar, the Mozambique Channel and the East Coast of Africa to Linde, and isolated charts for the Amiranté Islands and the Chagos Archipelago. A coastal chain of seven charts was to stretch from the Persian Gulf to the Bay of Bengal. The Ganges Delta was already covered by Dalrymple's 1772 Bay of Bengal chart.⁵¹ A second chain of six charts was to cover the coasts of mainland South-east Asia from Chittagong to Malaya, Indo-China and Macao, joining a group of four charts to cover Sumatra, Java, Borneo and the Java Sea. One further isolated chart was envisaged for western Australia. No charts were included of the Atlantic Ocean, lying outside the area of East India Company monopoly. (Dalrymple tried in July 1779 to obtain separate payment for the two charts of the coast of Brazil which he had been preparing from Dutch sources before his appointment, only to include them later in his Company work.⁵²) Also omitted were the series of charts from Balambangan to China and of Celebes, which Dalrymple had

not yet completed from 1774.⁵³ The 1779 scheme therefore complemented the work Dalrymple was undertaking privately.

The publication of this series remained a long-term objective: in 1783 Dalrymple announced that 'It was my intention to have postponed the Publication of a Set of Charts, 'till I had extracted all the Journals'.⁵⁴ Examining the ships' journals was a lengthy task, not compatible with the Company's requirement to assess his progress after one year.⁵⁵ In order to be able to show proof of work done Dalrymple resumed in 1779 the publication of plans and views of the type which had formed his *Collection of Plans of Ports* in 1775. As the bulk of his collections were in Madras awaiting shipment to London, his choice for engraving was limited. In his first Company year Dalrymple published fourteen plates of views of land and twenty of plans of ports.⁵⁶ Views of land predominated, partly because of the availability of material from Richard Peirce for four plates of views in the Strait of Malacca.⁵⁷ The views in six other plates came largely from ships' journals at East India House or from other sources readily available in London.⁵⁸ The Brazil views were from Van Keulen, and three plates from Benjamin Henry's views in the *Grenville* in 1775, in the Azores, at the Cape and approaching Madras.⁵⁹ Two plans were from Dalrymple's own surveys, of Simon's Bay from the 1775 *Grenville* visit, and from his 1760 voyage to Indo-China.⁶⁰ Three came from *Swallow* in the Red Sea in 1776, though were not by Dalrymple.⁶¹ Six, of the Seychelles and of Borneo, were from East India Company materials.⁶² The first East India Company plans thus to appear were those of Yanbu 'al Bahr in the Red Sea, and of Tien-ch'eng in China with Gelang Bay on Hainan, bearing a publication date of 20 April 1779.⁶³ They were typical of much of his 1774-75 work: each was a single-source sketch survey of a harbour, with topographical notes and views of land for approach recognition. As in 1774-75, Dalrymple issued textual explanations, often extracts from

journals, to accompany certain plans: for Tien-ch'eng he printed part of Stainforth's journal in the *Queen*, from whom he had obtained the plan.⁶⁴

After the loss of the *Colebrooke* on the Anvil Rock, Dalrymple gave particular attention in his work to observations in False Bay. To accompany his first year's plans he printed the tables of angles of the views he had taken in False Bay during the *Grenville's* visit in 1775, connecting them to the series of views of land by Henry, and to his own survey of Simon's Bay.⁶⁵ He had intended trying to locate the Anvil Rock from shore when in Simon's Bay in 1775.⁶⁶ As part of the 'explanation' he assembled and printed a series of accounts of ships sighting the rock, including Moffat's account of 1745 which he had notified to D'Aprés in 1767.⁶⁷

Dalrymple requested five advances of £100 for expenses in 'extracting, copying, drawing, engraving and printing', in his first year: the Company kept a running account for his expenses thereafter.⁶⁸ He submitted a report, apparently in May 1780, and on 12 July the Court of Directors confirmed his appointment at an annual fee of £500.⁶⁹

Dalrymple was to account half-yearly for his expenditures, which were not to exceed an annual limit of £500 'unless by special order'. He was to deliver to the Court 100 impressions of each plate and 100 copies of all printed instructions, after which the plates and publications were to become his property, to dispose of copies to others as he wished.⁷⁰

In the next three years Dalrymple's work continued along similar lines. On 26 July 1780 he applied to the Court of Directors for a 'proper place' to be allotted for him to carry out his work.⁷¹ In December 1778 the Court had ordered that his collection of geographical materials should be returned from Madras,⁷² and on 26 September 1780 he

requested the release from the Company's baggage warehouse of twenty-seven chests and boxes of books and maps, arrived from Madras in the *Southampton*.⁷³ The 'remaining part of his effects' arrived in the *Norfolk* in February 1781.⁷⁴ With the return of his collections Dalrymple had a wider range of resources for the plans which predominated in his publications.

Dalrymple made almost no progress with the advertised chart series in these early years: after he retrieved his papers from Madras much of his compilation effort went into the Philippines charts series.⁷⁵ The official publication for 1780-81 comprised fourteen plans only,⁷⁶ and included three of the Atlantic Ocean plans (Fernando Noronha, Ascension and Tristan da Cunha) which Dalrymple had intended in 1769 to issue with his *Memoir of a Chart of the Southern Ocean*.⁷⁷ In October 1781 he brought together the first two years' work in *Collection of Views of Land and of Plans of Ports in the East Indies* 1781.⁷⁸ Similar to the 1775 *Collection of Plans of Ports* in concept, this new publication recounted Dalrymple's 1780 confirmation, gave lists of the plates published in 1779-80 and 1780-81 with notes on their provenance and utility, and provided 'explanations', similar to those of the 1775 *Collection*, for selected plans.

In the publication for 1781-82 Dalrymple issued a chart of the coast from the Persian Gulf to Ras Ormara from William Robinson's 1774 survey,⁷⁹ a single-source precursor of his chart scheme. In 1781 Dalrymple issued journals and accounts for the first time as separate publications in the Company series, not connected with the plans.⁸⁰ These included Dalrymple's own voyage in the *London* on the coast of Mindanao.⁸¹ During the fourth year, 1782-83, Dalrymple focussed on five areas: Brazil, Madagascar, the Amiranté Islands of the Indian Ocean, Ceylon and the south-east coast of India. In a publication of twenty-six

plans, eight charts and one plate of views of land, he included the two charts of the Brazil coast which he had been preparing since 1778.⁸² No separate letterpress journals were published, but instead an introduction to the third and fourth years' issues, the letterpress *Collection of Charts, Views of Land and Plans of Ports in the East Indies* 1783.⁸³ This was similar in scope to the introduction of the 1781 *Collection of Views of Land and of Plans of Ports in the East Indies*, giving lists of plates and notes of their provenance. The explanations to selected third- and fourth-year plans were later published separately as *Explanations to Plans of Ports &c.* 1784.⁸⁴

Among the conditions of Dalrymple's service was a stipulation that 'special order' requirements for publications 'not in course' were to be dealt with separately from the annual allocations of funds.⁸⁵ The entry of the French and Dutch into the American War in 1781 placed the English Company's eastern routes to China in danger, and Dalrymple was commissioned to produce a group of plates, chiefly of the Celebes, Moluccas, and islands to New Guinea and New Britain, but also including ports in south-west Africa and around Bombay. Between late 1780 and August 1782 he produced twenty-eight plans, eleven charts and fourteen plates of views of land, in a group described as 'Eastern sea charts by special order' or 'by special order during the course of the War'.⁸⁶ In appearance there was nothing to distinguish these plates from those of Dalrymple's annual publications. To complement them, and at the request of the East India Company Secret Committee, Dalrymple wrote in June 1782 a *Memoir concerning the Passages to and from China*.⁸⁷ This analysis of the wide range of routes in the Eastern Archipelago for ships from England or India to avoid French or Dutch interception was the first synthesis of the results of his ongoing examination of Company ships' journals. With the *Memoir* went Dalrymple's edition of George Robertson's account *Strait of Allas*, to explain one of the

'special order' plans.⁸⁸ Dalrymple received £324.14s.7d. for his expenditure on this special order, the payment being made on 13 March 1782 separately from his running account of annual disbursements.⁸⁹

In the first five 'annual' series⁹⁰ Dalrymple laid particular emphasis on plates of views of land. Between 1779 and 1783 thirty out of 171 published plates were of this type, and during this time he had fifteen more engraved (but not published) to accompany his private work on charts of the Philippines and the Eastern Islands. A plate might contain up to thirty separate drawings, each with bearings of the salient features from the point of observation. Dalrymple consistently advocated the use of such collections of views of land to simplify coastal navigation and, in island groups such as those of the East Indies, to aid recognition and position fixing:

A proper Set of Views should contain, not only distant prospects to distinguish the Land, from the time it becomes first visible above the Horizon, 'till within a few miles of it; but also Views still nearer the Shoar which are useful, to give the most competent Description of the Country, as well as pointing out the proper place to [anchor], for avoiding dangers, by leading and cross marks; for shewing the most commodious places to land, or for wooding and watering: In the Views not only the Bearing, or Angle by the Hadley, of every Point, and of every remarkable Peak or Prominence should be taken, but also the Altitudes above the Horizon, noting the height of the Eye from the Surface of the Water; ...⁹¹

Apart from his collection of his own views of land, he rapidly located many in ship's journals in 1779 and wrote to D'Aprés of his intention to use them:

As I find many Views of Land in the Records of the East Ind. Company as well as in private hands, I am induced to engrave a Suite of Views of Lands for the whole Course of the Indian Navigation.⁹²

By October 1781 he had formulated this idea in print:

It is proposed to publish a compleat Collection or Series of Views of all the Lands, from England to the most remote parts of the East-Indies: ... It would be very desireable to have this Series regular and unbroken; but ... we must be satisfied with the disjointed Scraps as they can be

collected, and leave to a future Period the regular and perfect execution of this Description.⁹³

He returned to it in increasing detail in 1782 and 1783, contemplating a hypothetical voyage with government funding to establish the geographical positions of prominent headlands throughout the world, using Arnold chronometers.⁹⁴ But in the ten years after 1783, though he continued to include views on plan plates, he was to publish very few separate plates of views of land.⁹⁵

By the terms of Dalrymple's contract each chart, view or plan plate became his property after he had delivered 100 impressions to the Company. In 1783 he began consciously to exploit this developing asset by assembling sets of his publications for commercial sale. He had long offered the charts of the South Atlantic Ocean and the Bay of Bengal with memoirs at 5 shillings each, sets of *Collection of Charts and Memoirs* 1772 at 2 guineas, and sets of *Collection of Plans of Ports* 1775 at 4 guineas, the last two latterly through Nourse and Elmsly.⁹⁶ In 1777 he had supplied Henry Gregory with sets of impressions of the 1774-1775 plans of ports for an augmented issue of the fourth edition of Herbert's *New Directory for the East Indies*.⁹⁷ In 1781 he began to sell impressions from his 1779-1781 East India Company plates, offering them in an advertisement in *Collection of Views of Land and of Plans of Ports*:

Any of the Plates of the Views of Land or Plans with Views may be had separately at 1s. each; the other Plans at 6d. each.⁹⁸

But in 1783 he included with *Collection of Charts, Views of Land and Plans of Ports* a separate price list for all his engraved plates, complete to April 1783, and incorporating plates from his 1772 and 1775 collections.⁹⁹ The prices were by the set or individually: 202 plates of plans at 6d., 1s. or 2s. each or 3 guineas a set; 37 plates of views of land at 2s. each or 1½ guineas a set; 10 small-format charts

from 1s. to 4s. each or at 19s. a set; and 19 large-format charts from 2s.6d. to 5s. each or at 3 guineas a set. Greater discounts were available on combined sets, the complete collection being offered at 7 guineas. Dalrymple also offered three maps he had had engraved, of Broach, the Madras lands, and Itchapour,¹⁰⁰ and the five views Henry had drawn in south India in 1776,¹⁰¹ at set prices of 1½ guineas and 10s.6d. respectively. Dalrymple had revised the text of the 1775 *Collection of Plans of Ports* in 1782,¹⁰² and improved, modified or replaced eighty-one of the 83 plates during 1781 and 1782 for reprinting in 1783 together with his East India Company plates as part of this venture.¹⁰³

To stimulate general interest Dalrymple launched a separate scheme of publications in September 1783 to present his charts, views and plans as a general geographical series. He re-compiled the descriptive and provenance notes from the introductions to the 1775, 1781 and 1783 collections into three volumes which were

intended to have accompanied The Collection of Plates to such Purchasers as were not interested in Sea-Affairs, but might have chosen to have had The Collection, as a Geographical Work. ...¹⁰⁴

These introductory volumes were *General Collection of Nautical Publications* 1783 (described as a general introduction to the whole series), *General Introduction to a Collection of Plans of Ports &c. in the Indian Navigation* 1783, and *A Collection of Views of Land in the Indian Navigation* 1783.¹⁰⁵ A fourth volume, an introduction to charts, was at first postponed and later abandoned.¹⁰⁶ Dalrymple explained, for the non-nautical user, his division of his work into three classes: charts, plans of ports, and views of land. He explained that he had omitted the 'Extracts of Sea-Journals, and Nautical Instructions' from *Explanations to Plans of Ports, &c.* 1784 and from the 'explanations' in the 1775 and 1781 *Collections* as too technical. He summarised instead.

the disclaimers he used in chart production, that blank spaces denoted only that the dangers in those areas were unknown, that the marking of some dangers did not preclude the existence of other dangers in the same area, and that dangers marked on a small-scale compilation chart might not be among those shown on a larger-scale plan of the same area derived from particular (or single-source) observations. Dalrymple was careful not to claim more than he could answer for:

In the exposition of the Data, on which The Charts are constructed, I give my authorities: I am only responsible for giving them faithfully, and adhering to them exactly. ...

Whoever knows any thing of making Charts from a variety of materials, must know that it is impossible to reconcile those materials perfectly, indeed it often happens that they are totally contradictory; in the last case either one or both must be rejected: in the first an Approximation is all that can be effected in forming a General Chart: where I find a disagreement in Particular Charts, I have thought the best way was to engrave both, when I had nothing to enable me to decide on the merits of either.¹⁰⁷

After 1783 Dalrymple deemed his plans of ports to have run in a continuous published series from 1774, as the East India Company plates he was using had become as much his own property as his 1774 and 1775 plates.¹⁰⁸ In the *General Introduction to a Collection of Plans of Ports* 1783, he recounted his East India Company appointment, and gave a list of 267 plates of plans completed or in progress in September 1783, with descriptive or provenance notes: this list combined the plans published in 1774 and 1775, those of 1779-1783, and a number either completed or proposed for his fifth year, 1783-84.¹⁰⁹ Some in this last category were published only much later in modified form, and others never appeared. As there was no specific checklist of plates to accompany the volumes of introduction for the non-nautical user, the text volumes were superficially applicable to whatever later selection of Dalrymple's charts, plans and views a purchaser might wish them to accompany.

Also in 1783, Dalrymple entered into a new arrangement with Henry Gregory for his charts, plans and views to be reprinted in an enlarged second issue of the fifth (1780) edition of *New Directory for the East Indies*. Instead of supplying Gregory with sets of impressions for pasting onto blank leaves, as in 1777, Dalrymple released the plates for printing under Gregory's supervision on the latter's preferred thicker chart paper.¹¹⁰

Dalrymple changed the style and focus of his publications and his chart compilation after 1783. He ceased to publish separate plates of views of land, partly because of expense, except where coherent series were offered to him to complement charts and plans.¹¹¹ He continued with the annual series of publications, chiefly plans of ports, but dispensed with the annual letterpress introductions and explanations, and consequently did not develop or revise the parallel general introductions for non-nautical users. His postponement of the general introduction to charts in 1783, on the grounds of 'there being several in great forwardness, which will come into the present Year's Publication', is indicative rather of the slow progress he was making in compiling adequate charts for the advertised series from limited resources.¹¹² The year 1783 marked the beginning of a period of five years in which much of Dalrymple's efforts went into the collection and reconciliation of data for small-scale charts, though not all connected with the advertised series.

Increasingly in the 1780s Dalrymple used the plans series as a vehicle for publishing source materials for his chart compilation, by-products of the chart compilation process, and large-scale plans which merited separate publication. After four years without publishing charts in the 1779 series, Dalrymple issued the first, his 'Chart of the Coasts of Guzurat and Scindy', in November 1783.¹¹³ In the accompanying *Memoir*

of a Chart from St. John's on the Coast of India to Cape Arubah on the Coast of Persia 1784,¹¹⁴ Dalrymple described the process of constructing the chart from fifteen manuscript source charts, including that by William Robinson which he had published in 1781.¹¹⁵ Five of the plans in Dalrymple's publication of 1783-84 were of the Gujarat and Sind area, and identifiable as by-products of Dalrymple's work on the list of chart sources in the *Memoir*.¹¹⁶

In April 1785 he had ready the 'Chart of the Straits of Sunda and Banka' and published it the following year with an accompanying memoir describing the extent to which different printed and manuscript sources had been pieced together to form the chart.¹¹⁷ *Memoir of a Chart of the Straits of Sunda and Banka* shows that the chart was a rapid compilation, correlating many known sources to form a composite chart. Source materials which gave conflicting representations were earmarked for separate publication in the plans series, among them a chart from Van Keulen which 'has many circumstances which deserve attention, although it is too dissonant to the Modern Observations, to connect with them'.¹¹⁸

In 1784 and 1785 Dalrymple proposed a survey of the Coromandel Coast in his *Collection of Nautical Papers concerning the Bay of Bengal*.¹¹⁹ Late in 1784 he had turned to the Arakan and Ava coasts and the Andaman and Nicobar Islands, with the publication of John Ritchie's journal of his running survey on the east side of the Bay of Bengal,¹²⁰ and *Collection of Nautical Papers concerning the Bay of Bengal*. Dalrymple claimed in March 1785 to be preparing 'a Chart, now in great forwardness, of the Bay of Bengal'.¹²¹ Between July 1784 and April 1785 he had twenty-eight plates of source material for this collection engraved, sixteen of the Arakan and Ava coasts, ten of the Andaman and Nicobar Islands, and two of the Coromandel Coast (one of which was

a large chart-size plate).¹²² Though, with few exceptions, these gave only conflicting representations of coastline at small scales, Dalrymple included them, without comment, in his 1784-85 publication of charts and plans.

In 1786 he was advocating to the Bombay government a chronometer survey of the coast of Western India to provide data for the Malabar Coast charts in the series,¹²³ and sent instructions to Bombay for the use of Arnold chronometers.¹²⁴ John McCluer, of the Bombay Marine, was chosen for the survey, on his reputation for surveys in the Persian Gulf in the early 1780s.¹²⁵ Dalrymple had published McCluer's *An Account of the Navigation between India and the Gulf of Persia* in 1786 with a lengthy introduction of his own, analysing and comparing previous maps and charts of the Gulf.¹²⁶ Besides publishing McCluer's own charts of the Persian Gulf as single-source charts in 1786 and 1788,¹²⁷ Dalrymple illustrated his historical introduction to the cartography of the Persian Gulf in 1787 with twelve plates, in three groups, of representations of the shores of the Gulf.¹²⁸

As part of the chart compilation of the mid-1780s, Dalrymple turned again to the unsatisfactory chart of the Carimata Passage, left unfinished in 1780.¹²⁹ From journals of the passages of the *Granby*, *Vansittart* and *Nonsuch* in 1781 and 1782,¹³⁰ he was able to correct the position of the Natunas and northern Anambas on the chart, though not in relation to Pulo Aor and Serutu, the critical waymarks for the Carimata Passage. He produced a supplementary chart for the Natunas and Anambas, which survives in one example as a large correction slip overlaid on a copy of the Carimata Passage chart.¹³¹ This he explained in March 1786 in the obscure *Memoir of the Chart of the Natunas and Anambas Islands*.¹³² The introduction to this Memoir explained the correcting chart, and precedes the main text, which is separately titled

'Memoir of a Chart of the Carimata Passage'. This discussed the original chart and the correction together, and embodied the text of an unpublished pre-1775 explanation of the chart as 'Memoir of a Chart of the Carimata Passage, and of the Natunas and Anambas'. Dalrymple pointed out that the original chart had been constructed while the bulk of his papers were in India,¹³³ but he accepted that the revision of 1786 was still imperfect, and the chart remained unpublished. In 1785-86 he published in the plans series nine separate plates of ships' tracks, source material for his revision of the Carimata Passage chart and for the construction of the chart of the Straits of Sunda and Banka, and explained in *Memoir of the Chart of the Natunas, Anambas and adjacent Islands* 1786.¹³⁴

Dalrymple also turned his attention to smaller-scale charts of the Indian Ocean in 1784 and 1785. In the course of a correspondence which he had opened in 1783 with Fleurieu, head of the Dépôt des Cartes et Plans de la Marine in Paris,¹³⁵ Dalrymple revealed in March 1784 that he was compiling a chart of the islands and shoals east and north of Madagascar:

I am present engaged in making a Chart from 26°.30'S. to 0°.30'N Latitude including the East Coast of Africa from Delagoa with Madagascar & all the Islands to Roderigue: in collecting the materials for constructing This Chart I perceived that the Plan given by M. D'Aprés of the No. End of Madagascar (in the plate of Roderigue) has no Latitude or Scale: if the MS will supply this deficiency You will oblige me very much by the communication.¹³⁶

The chart, which conforms to the latitude and geographical limits of Dalrymple's description, was never published,¹³⁷ and surviving preliminary proofs are in the style he preferred of his Philippines charts of the 1770s. It shows, at a scale of 75 nautical miles to 1 inch (5 degrees to 4 inches), parts of the coasts of Madagascar with Mauritius, Réunion and the shoals of the Mascarene Ridge.

Dalrymple's work on the islands and shoals from Madagascar to the Maldives in 1784 is reflected in twelve plates among the 67 plans or small charts for 1784-1785.¹³⁸ He had supplied D'Après de Manneville with information on the islands and shoals to the north-east of Madagascar, chiefly in the Chagos Archipelago, but himself worked on the Mozambique Channel which was more frequented by English ships.¹³⁹ After D'Après' death he asked Fleurieu in April 1784 for copies of D'Après' manuscript charts of the islands north-east of Madagascar,¹⁴⁰ and engraved from them six plates in the plan series between July and September 1784.¹⁴¹ Dalrymple's *Memoir concerning the Chagos and adjacent Islands*, dated 28 November 1785,¹⁴² summarised current knowledge of the geography of the Chagos archipelago, including the discussions by letter between D'Après and Dalrymple in the early 1770s.¹⁴³ Dalrymple engraved D'Après' chart and sent in to the Court of Directors an early copy or draft of his *Memoir* in October 1784,¹⁴⁴ and he appears to have been accelerating his work to furnish information for the plan for an expedition from Bombay to establish a settlement on Diego Garcia.¹⁴⁵ In April 1785 he requested the Court's permission to publish plans of Diego Garcia:¹⁴⁶ this was exceptional, as publication of his plans was normally a matter of routine. In this case two plans engraved in July 1784 were held back, together with a plate of ships' tracks,¹⁴⁷ for issue late in 1786 after the expedition had left Bombay.¹⁴⁸

At the same time Dalrymple was gathering data for a chart of the coasts of India and the Bay of Bengal, from Cape Monze (Karachi) to Banda Atjeh (Sumatra). In *Memoir of a Chart from Cape Mons to Acheen* 1785 he collected, and tried to reconcile, conflicting longitudes on the peninsula of India, and described the sources he had used for parts of the chart.¹⁴⁹ This chart, which similarly went unpublished, was also at a scale of 75 nautical miles to 1 inch, covering the area specified in

the *Memoir* between 2°.30'S and 25°N.¹⁵⁰ Five areas only are shown in the proof copies: Gujarat and Sind from Dalrymple's 1783 chart,¹⁵¹ the Maldiv Islands, Ceylon 'from a particular Hydrographical Map I have constructed, not yet published',¹⁵² the Madras coast 'also from a particular Hydrographical map not yet published',¹⁵³ and the head of the Bay of Bengal from Dalrymple's 1772 chart.¹⁵⁴

A 'Chart of the Indian Ocean' was proposed by Dalrymple in his memoir of 1787,¹⁵⁵ and described by him in a letter to Fleurieu of 28

February/2 March:

... a Chart from Madagascar to Basrah, Bengal, Malacca & Batavia which has sometime engaged my attention, and is now under the hands of the Engraver: it will be accompanied with a Memoir explaining the authorities, none of which are Secrets of State, and tho' they are far from being competent to construct a perfect Chart, I hope this will be found on examination to be better than any yet published, ...¹⁵⁶

The chart, known only from an example with a 1793 imprint date in Sir Francis Beaufort's collection,¹⁵⁷ is partly an extended composite of data from the two preceding charts, though with coastlines now almost complete, at a scale of 150 nautical miles to 1 inch, covering the full extent of the Indian Ocean, as Dalrymple described, between 25°S and 30°N. Though far removed in concept from the series of coastal charts proposed in 1779, Dalrymple's chart represents the culmination of his efforts to establish the reciprocal positions of the coasts of the Indian Ocean.

These small-scale charts remained effectively unpublished: the memoirs intended to accompany them were the chief tangible product of Dalrymple's close study of the tracks in ships' journals, and they elicited for analysis and evaluation a large number of plans and small charts which Dalrymple fed into his mill of publication for the East India Company.

In subsequent years Dalrymple's pattern of research and publication was similar, many of the plans and small charts in his plans series being generated from research into particular geographical areas or from the publication of particular surveys. Dalrymple continued to assemble plans of ports and nautical instructions into annual 'publications' for the Company. Each typically comprised twenty or thirty plans, perhaps with a single-source chart or a plate of views, and two or three letterpress items.¹⁵⁸ Each year's publication was differently focussed, depending in part on the plans he received, either singly or in groups, and in part on the materials in use in his chart work. The map collection of Governor Hornby of Bombay, which came to Dalrymple in July 1784,¹⁵⁹ he used immediately as a source of plans on the west coast of India: twelve were engraved from that source between August 1784 and January 1785 and issued immediately.¹⁶⁰ Dalrymple continued to draw on Hornby's collection in later years, particularly for *Oriental Repertory*.¹⁶¹ When Archibald Blair's surveys of 1786 in the Chagos Islands were returned to London in 1787, they were the first planned survey to come into Dalrymple's hands for publication:¹⁶² with Blair's *Remarks* he issued the large-format plan of Diego Garcia, a plate of views and two plates of plans in 1787-1788, all in the established series he had created.¹⁶³

Dalrymple also used the plans series to try to resolve conflicts between plans from different sources, such as the parallel representations of Fort-Dauphin and Foulpointe on Madagascar, issued on seven plates as part of the sixth year's publication of plans in 1784-85.¹⁶⁴ Dalrymple had intended in 1783 to publish one authoritative plan of each port, but was obliged by the irreconcilability of his sources to engrave instead seven plans of each, in the case of Fort-Dauphin providing a comparative diagram to show the discrepancies.¹⁶⁵

The emphasis in 1787-88 on plans and tracks in the Philippines and off the coast of Borneo coincided with publication of *Memoir concerning the Passages, at a Late Season, from India to China* 1788.¹⁶⁶ Dalrymple had issued in 1785 and 1787 second and third editions of *Memoir concerning the Passages to and from China*, the pamphlet he had produced in a few copies for the Secret Committee in 1782.¹⁶⁷ The new 1788 *Memoir* was intended as a supplement to that, and partly to rebut criticisms by George Robertson of Dalrymple's China Sea chart.¹⁶⁸ These two pamphlets were unusual among Dalrymple's publications in being primarily prescriptive in recommending routes to be followed in the Java Sea, China Sea and Eastern Islands.

Arising from this exercise, and connected with his unfinished chart of the Carimata Passage, was Dalrymple's study of the straits between Sumatra, Bangka, Belitung and Borneo. The route from the Strait of Sunda to Pulo Aor (the waymark for the China Sea) was of vital significance for the China ships, and, besides the Carimata Passage itself, the straits of Bangka and Gaspar, as well as the narrows between the various islands in the Gaspar Strait, all required to be known for passages in different seasons and winds. Dalrymple published in 1789 three accounts of ships' tracks to the east of Bangka, each tied to particular plates issued in the plans series,¹⁶⁹ and continued to publish tracks and observations on the coast of Bangka afterwards.¹⁷⁰

Dalrymple gradually developed the practice of preparing letterpress instructions and plates together, though he rarely packaged them for sale together. The three connected plans issued in 1788 of islands in the Mergui Archipelago, though they could stand without explanation, belonged to Thomas Forrest's *A Journal of the Esther Brig ... from Bengal to Quedah* which Dalrymple published the same year.¹⁷¹ John Henry Cox's *A Description of the Island, called St. Paulo* 1790 belonged

with Cox's plan of Vlaming's Road published in the same year,¹⁷² and the observations for John Goldingham's 1794 plan of the Pulicat shoals were published in *Survey of the Pulicat Shoals* 1794.¹⁷³ In each case the plans appeared in the annual lists of publications.

Dalrymple had limited influence over hydrographic survey work done by Company ships' captains. His involvement in McCluer's chronometer surveys of the Malabar Coast and Laccadive Islands, starting in 1786, was the exception rather than the rule, and, because of distance, he could have little effect on the progress of the surveys, though he was in private communication with McCluer over the provision of chronometers.¹⁷⁴ The results he published as he received them: a chart, five plans and *Description of the Coast of India* in 1789-90, two charts, five plans (including three of the Laccadives) and *Continuation of the Description of the Coast of Malabar* in 1790-91, and a plate of views in the Laccadives in 1791-92.¹⁷⁵ In 1789 Dalrymple did persuade the Court of Directors to allow Lestock Wilson to spend some days surveying in the straits to the east of Bangka on his outward voyage to Canton in the *Vansittart*, but only at the expense of shortening his intended stay in Canton and jumping the queue for loading and return.¹⁷⁶ Dalrymple supplied Wilson with copious instructions about shoals and observations.¹⁷⁷ The wreck of the *Vansittart* on 25 August 1789 while surveying in the Macklesfeild Strait between Bangka and Belitung¹⁷⁸ did not invalidate the purpose for which Wilson had been sent. Dalrymple published the survey as a chart in 1792-93, and printed Wilson's account at about the same time, though he did not formally publish it until 1806.¹⁷⁹ Dalrymple was in regular contact, too, with McCluer on his next expedition from Bombay, to New Guinea and the Palau Islands,¹⁸⁰ and he published charts and plans from McCluer in 1792 and 1793.¹⁸¹

In later years a wider range of sources provided material for Dalrymple's publication series. Through his friendship with Samuel Wegg of the Hudson's Bay Company he had become interested in the geographical work carried on by that Company's surveyors, particularly in fixing by chronometer the longitudes of the western outposts.¹⁸² Comparing these with the longitudes observed in Cook's third voyage on the Pacific coast of north-western America, he began to examine the possibilities of establishing communications between Hudson's Bay and the Pacific Coast. Wegg secured for Dalrymple easy access to the cartographic resources of the Hudson's Bay Company.¹⁸³ Dalrymple was already receiving information from Cox of the American harbours found by the Bombay expeditions of the 1780s,¹⁸⁴ and from James Johnstone and Charles Duncan of their surveys of 1787 and 1788,¹⁸⁵ when he published *Plan for Promoting the Fur-Trade and Memoir of a Map of the Lands around the North-Pole* in 1789.¹⁸⁶ Neither of these pamphlets was included in Dalrymple's regular lists of his publications, and his compilation 'Map of Hudson's Bay and of the Rivers and Lands between the Atlantick and Pacifick Oceans' of 1790 was never formally published.¹⁸⁷ Only the plans which he accumulated, chiefly from Cox, but also from Funter and Barkley, were published, without particular explanation, in the annual plan series between 1789 and 1792.¹⁸⁸

Dalrymple was now interpreting his Company remit of 1779 more widely. In 1790 he faced criticisms by Buache¹⁸⁹ of his map of the Solomon Islands in *An Historical Collection of the several Voyages and Discoveries 1769/1770*,¹⁹⁰ and rebutted them in *Considerations on M. Buache's Memoir*.¹⁹¹ To do so he referred to the Linschoten map and to the Dauphin map, which he had recently published,¹⁹² and published seven further plates, including a re-issue of his 1769 map of Dampier's and Herrera's representations of the Solomon Islands.¹⁹³ Though included in the publication of plans for 1790-91, none of these

maps could serve any navigational purpose. Dalrymple's series of five small-format charts of the Mozambique Channel, all taken from printed atlases and also issued in the 1790-91 plans series,¹⁹⁴ further demonstrate the use of the plans series as a vehicle for wider comparative studies than an examination of ships' journals alone would suggest.

After Dalrymple embarked in 1791 on the publication of *Oriental Repertory*,¹⁹⁵ his charts and plans in the annual series decreased. The only coherent series of plans connected with letterpress texts between 1791 and 1794 was a group of five plans of Mauritius and Réunion in 1793-94, illustrating *Collection of Papers concerning the Navigation, Winds and Weather, at the French Islands Mauritius and Bourbon* 1794.¹⁹⁶ This in turn was linked with articles in *Oriental Repertory* in 1793, republished as *Some Remarks made at Mauritius* in the same year.¹⁹⁷ By June 1794, when the annual lists of publications ceased, the issue of charts had become less frequent, and projected series were left incomplete.

In April 1786 Dalrymple had to be reminded by the Court that no impressions from Company plates were to be published elsewhere before the Company's entitlement of 100 copies had been delivered.¹⁹⁸ He had been offering charts, plans and views for sale since 1781, and, after his itemised price list of April 1783, he continued to offer the 1783 set with annual additions.¹⁹⁹ In 1785 he removed the distinction between plans and 'charts which will bind up with the plans', treating all full-plate items as charts whatever their scale and including all smaller-format charts with the plans. In April 1786 Dalrymple produced an indexed and classified list of plans of ports, dividing the oceans of the East Indies navigation into eighteen classes.²⁰⁰ Developing the tabular style of listing he had devised for the 1775, 1781 and 1783

Collections,²⁰¹ he supplied for each item a short title, geographical location, author, date and source, prefacing the entry with codes for the year of publication, scale, country of origin, and type of original document (whether manuscript or printed). This became a basic reference list for Dalrymple's plans which he updated annually to June 1794 with sheets of addendum slips.²⁰² The 1786 *List of Classes* was not a priced list, and did not include charts, views, letterpress instructions, or other maps. Copies are now chiefly found, with or without addenda, bound with presentation sets of letterpress sailing directions from the mid-1780s or as contents lists for collections of plans from the same period.²⁰³

Besides maintaining stocks of impressions for direct sale, Dalrymple again agreed with Henry Gregory in 1787 to release his plates for reprinting. Gregory had published the sixth edition of *New Directory for the East Indies*, now under Samuel Dunn's editorship, in 1787,²⁰⁴ and he produced shortly afterwards a second issue, augmented with impressions of all Dalrymple's current plates up to 10 May 1787. Though this form of publication was not under Dalrymple's control, it provided a shop-window for his work. The *New Directory for the East Indies* still, in 1787, relied heavily for coastal charts on the plates Herbert had made in 1758 from D'Après de Manneville's 1745 *Le Neptune Oriental*. Gregory had kept Dalrymple's charts, plans and views as a separate section in the fifth edition of the *New Directory*, but in his augmented sixth edition the pages of Dalrymple impressions were interspersed throughout the binding, dominating the work. Gregory paid some attention to Dalrymple's geographical sequence of classes, but his arrangement was governed by the need to print the plates compactly on as few pages as necessary.²⁰⁵

Dalrymple's own main marketing exercise began in June 1789, at the completion of his tenth year of publication for the Company, with the issue of new itemised price lists for both engraved and letterpress publications: *List of Charts, Plans of Ports, &c.* 1789 and *Nautical Memoirs and Journals* 1789.²⁰⁶ The first list offered 28 charts, 454 plans (in eighteen classes) and 40 views, singly at much the same prices as had obtained since 1781, and in sets at significant reductions.²⁰⁷ The letterpress list, the only comprehensive list Dalrymple made of his published nautical instructions, offered 48 publications in twenty groups, giving publication information, pagination and price for each.²⁰⁸ Both 1789 lists were updated by the issue of annual priced lists of new publications for five years to June 1794.²⁰⁹ The entries for plans of ports correspond to the contents of the addenda slips to the 1786 *List of Classes*, but the annual addenda to the 1789 lists also included charts, views and letterpress memoirs.

It was neither difficult nor inordinately expensive for Dalrymple to keep charts, views or plans 'in print': the main capital cost, the provision and engraving of the copper plates, had been met initially by the Company. Apart from any corrections, only make-ready and presswork costs had to be met by Dalrymple in any reprinting. The addition of new plans or views to a plate would normally necessitate the provision of 100 fresh impressions to the Company, at Company expense,²¹⁰ but sufficient minor correction can be seen throughout the 1780s to suggest, with evidence of different printing papers, that Dalrymple reprinted charts, views and plans repeatedly, with a comprehensive general reprinting occurring in or shortly before 1789.²¹¹ Maintaining stocks of nautical instructions was a different matter: the cost of first typesetting was charged to the East India Company, together with the cost of paper and presswork for the obligatory 100 copies, but thereafter the costs fell on Dalrymple. If the printers' convention of

charging presswork in units of 250 copies was followed, Dalrymple could have acquired a further 150 copies of each letterpress item at little or no extra cost, but after the type had been distributed any subsequent replenishment of stocks incurred significant new costs for fresh typesetting.

Dalrymple had included new impressions of the charts from his 1772 *Collection of Charts and Memoirs* among those he was offering for sale from 1783 onwards, and in 1785 he considered a new edition of the 1771 memoirs, the Company agreeing on 3 August to subscribe for 50 copies.²¹² The second edition of *General Introduction* and the six memoirs were published early in 1786, with revisions and additional material.²¹³ The next year Dalrymple began a comprehensive re-publication of his East India Company nautical instructions, beginning with his general pamphlet *Brief Statement of the Prevailing Winds*, and his publications on the Arabia and Sind coasts, and on the Bay of Bengal.²¹⁴ He also published a third edition of *Memoir concerning the Passages to and from China* in 1787, and a second edition of *Memoir of the Chart of the Straits of Sunda and Banka* only a year after the first edition had appeared.²¹⁵ The explanations to the 1775, 1781 and 1783 collections were also republished in 1787, the last two without introductions, and the first now in a third edition.²¹⁶ The stimulus for at least some of this re-publication was to furnish Henry Gregory's requirements for letterpress instructions to accompany his reprinting of Dalrymple's charts and plans. Too few copies have been found of late editions of Dalrymple's nautical instructions with Gregory's imprint to advance a complete argument, but part of the 1787 editions of at least four such works were prepared with Gregory-imprint cancel title-pages.²¹⁷ Gregory had George Bigg, Dalrymple's printer, print a collection title for Dalrymple's Bay of Bengal publications in 1787 and used it to cover copies of the separate works without Gregory

imprints.²¹⁸ There was also, in 1787, a new third edition for Gregory of the constituent letterpress parts of the 1772 *A Collection of Charts and Memoirs*; this was a straight re-setting of the 1786 second edition, and is not known other than with a Gregory imprint.²¹⁹ Gregory therefore participated in the 1787 letterpress re-publication in three ways: he received copies of works which Dalrymple had had re-published himself; he shared in the re-publication of certain other works, commissioning title-pages with his own imprint as publisher for part of the run; and, through Dalrymple, he ordered new editions from Dalrymple's printer of works which had been reprinted earlier. Where Gregory's requirements alone necessitated a new third edition, without change of text, Dalrymple's 1789 list of *Nautical Memoirs and Journals* continued to advertise the second edition as the current edition.²²⁰ The organic connection of 1787 between Dalrymple and Gregory appears to have been short-lived: Gregory produced another issue of the sixth edition of *New Directory for the East Indies* in 1790, but no copies are known augmented with Dalrymple's plates.²²¹

Dalrymple's knowledge of the East Indies navigation combined with his experience as a chart publisher in London meant that increasingly in the 1780s, and particularly after his memoirs on the China passages, he was consulted on navigational questions by the Court of Directors, by government, and by influential contemporaries in London. He was appointed to carry out the official inquiry in 1783 into the loss of the *Grosvenor* on the coast of South Africa.²²² As a Fellow of the Royal Society, and after 1777 a member of the Royal Society Club,²²³ he regularly met and dined with many of Sir Joseph Banks' circle. He was closely involved in the engraving of the plans and illustrations to accompany the publication in 1784 of the account of Cook's third voyage,²²⁴ including the documented disagreement over the publication of the chart of the northern Pacific Ocean.²²⁵ In his *Case for*

personal exemption from the proposed operation of a disadvantageous clause of Pitt's 1784 India Bill he drew attention to the value of his advice to the East India Company Secret Committee on the passages to China.²²⁶ He contributed, perhaps unsolicited, in 1786 a pamphlet to the public discussion on the desirability of a penal colony at Botany Bay or Norfolk Island, advocating St. Helena instead.²²⁷ Charles Cathcart, in correspondence with Pitt in 1788 over the embassy to China, enclosed a memorandum from Dalrymple discussing the merits of different routes for the embassy's ships.²²⁸ Through his connection with Wegg and the Hudson's Bay Company he was involved in 1789 in plans for exploration on the north-west coast of America, and in February 1790 submitted a paper recommending exploration by sea in place of the suggested overland expedition from Quebec.²²⁹ News of the Nootka Sound crisis in 1790 stimulated the historian and geographer in Dalrymple to two pamphlets dismissive of the Spanish claims to territory,²³⁰ and he published later in the year a historical account of early Spanish expeditions northward from California, illustrating his narrative with four plates of maps.²³¹ He was kept informed, unofficially, of the Privy Council examination of Meares in February 1791.²³² In 1792 he was called on for advice on the harbours and islands off the Pacific coast of South America which might be used as refuges for whaling boats.²³³ McCluer kept Dalrymple informed of the progress of his surveys in New Guinea in 1791 and 1792 and subsequently in the Palau Islands, and Dalrymple transmitted information from McCluer's reports in letters to Dundas.²³⁴

From a base of 'examining the ships' journals' at East India House, with the freedom to publish such materials as he might select from that and other sources, Dalrymple had arrived at a position where he could expect to be consulted on the geographical and navigational aspects of East India Company policy. In the new circumstances of the 1790s

knowledge of the East Indies navigation and Pacific Ocean geography increasingly contributed to the planning and execution of British diplomatic and naval policy. In London this expertise was increasingly concentrated in the formal and informal groupings associated with Sir Joseph Banks as President of the Royal Society. Dalrymple was close to Banks, and to this circle of government officials and advisers, particularly through his regular attendance at the Royal Society Club dinners.²³⁵ When the Admiralty recognised in 1795 the deficiencies in its own expertise, it is not surprising that Dalrymple, with his background in East India Company hydrography, should have emerged from this group as a preferred candidate to examine and evaluate the chart materials accumulating in the Admiralty.

NOTES TO CHAPTER 4: 'HIS PARTICULAR OCCUPATION'

* Dalrymple had 'Nautical Remarks and Charts of various parts of India, collected, sufficient to make a more complete Set of Charts and Sailing Directions than any hitherto published. But to do this would be too great an Undertaking for any man, unless it was his particular occupation.' (*General Introduction to the Charts and Memoirs* 1772, p. xi).

¹ The memorial is not present in East India Company, Miscellaneous Letters Received, 1779 (London, India Office Records [IOR]: E/1/64-65). Dalrymple printed the text in the account of his appointment in *Collection of Plans of Ports in the East Indies* 1775: second edition 1782, introduction, pp. 26-34, especially pp. 27-28. The memorial was referred by the Court of Directors to the Committee of Correspondence (East India Company, Court Minutes, 3 February 1779 (IOR: B/94, p. 502)). Dalrymple's account of his appointment and confirmation, also printed in *General Introduction to a Collection of Plans of Ports &c. in the Indian Navigation* 1783, pp. 7-15, and in part in *Collection of Views of Land and of Plans of Ports in the East Indies* 1781, introduction, pp. 1-2, corroborated by East India Company records, is an important additional source.

² East India Company, Committee of Correspondence Reports, 1 April 1779 (IOR: D/30, p. 149); East India Company, Court Minutes, 1 April 1779 (IOR: B/94, p. 627), printed in *Collection of Plans of Ports in the East Indies* 1775, second edition 1782, introduction, p. 30.

³ East India Company, Court Minutes, 25 February 1779 (IOR: B/94, p. 546). See also *Collection of Plans of Ports in the East Indies* 1775: second edition 1782, introduction, p. 30: 'An objection was made that no Sum was specified for the disbursements, and I was desired to mention some amount: In a short letter of 25th February I observed, that I did not think a smaller sum than £200 p[er] annum would be effectual, and that I did not think a greater sum than £500 p[er] annum could be wanted for Disbursements.' Dalrymple's memorial had left blanks instead of suggesting figures for remuneration and disbursements.

⁴ East India Company, Home Salaries, Quarterly Salary Warrants, 1760-1809 (IOR: L/AG/9/4/13).

⁵ *Collection of Plans of Ports in the East Indies* 1775: second edition 1782, introduction, p. 32.

⁶ *Collection of Plans of Ports in the East Indies* 1775: second edition 1782, introduction, pp. 33-34.

⁷ For example, Dalrymple to Beaufort, 27 May 1808 (San Marino, California, Henry E. Huntington Library: Beaufort Collection): 'I ... have been 29 years employed expressly as Hydrographer by the East India Company'. There is no mention of Dalrymple in East India Company, Quarterly Salary Warrants, 1760-1809 (IOR: L/AG/9/4/13). In 'An Abstract Statement of the Expense of the East India Company Establishment at Home', prepared for the Board of Control on 28 April 1785 (Home Miscellaneous Series (IOR: H/362)), the authorities for and expenditures connected with Dalrymple's work were treated in a separate appendix.

⁸ East India Company, Court Minutes, 1781-1808, s.n. Dalrymple (IOR: B/97-146); East India Company, Cash Journals, 1779-1811, *passim* (IOR:

L/AG/1/5/21-27). The October 1790 payment was carried in error into Dalrymple's running disbursements account in General Ledger Q (IOR: L/AG/1/1/26): 'Cash for a Quarter's Gratuity, examining Ships Journals &ca.' The last payment was for the quarter ended 25 March 1808 (East India Company, Court Minutes, 1 April 1808 (IOR: B/146, p. 1455)).

⁹ *Collection of Plans of Ports in the East Indies* 1775, second edition 1782, introduction, p. 28; East India Company, Marine Records, Journal of Colebrooke, 1777-1778 (IOR: L/MAR/B/532C).

¹⁰ J. B. N.-D. D'Après de Mannevillette, *Mémoires sur la navigation de France aux Indes* (Paris, 1765).

¹¹ Dalrymple to D'Après de Mannevillette, 12 February 1767 and 8 March 1768 (AN: Marine 3JJ 340(3)).

¹² *Collection of Plans of Ports in the East Indies* 1775, second edition 1782, introduction, pp. 27.

¹³ J. van Keulen, *De Nieuwe Groote Lichtende Zee-Fakkel, Het Sesde Deel* (Amsterdam, 1753).

¹⁴ Günter Schilder, 'Organization and Evolution of the Dutch East India Company's Hydrographic Office in the Seventeenth Century', *Imago Mundi*, vol. 28 (1976), pp. 61-78, especially pp. 62-64.

¹⁵ Dépôt des Cartes et Plans de la Marine report, 21 April 1780 (AN: Marine 1JJ 17(14)). An official inventory was taken in 1776 of the materials in D'Après' custody at Lorient.

¹⁶ J. B. N.-D. D'Après de Mannevillette, *Le Neptune Oriental* (Paris, 1745); second edition (Paris, 1775); and *Supplément au Neptune Oriental* (Paris, 1781).

¹⁷ Jean Sutton, *Lords of the East* (London, 1981), pp. 96 and 105-107. See IOR: L/MAR/C/652-666 (East India Company, Marine Records, Commanders and Mates, Descriptions 1771-1833) for certificates of qualification.

¹⁸ East India Company, Ships' Journals 1702-1833 (IOR: L/MAR/B series).

¹⁹ East India Company, Miscellaneous Letters Received, 1768: Dalrymple to Court of Directors, 28 December 1768 (IOR: E/1/51, pp. 176-176a). East India Company, Court Minutes, 28 February 1770 (IOR: B/85, p. 457). Access to the the collection of ships' journals was free to the officers of Company ships: 'The only free Access I have had to the Records in the India-House has been to the Sea-Journals: this no mate of an Indiaman is refused, nor to have extracts on his paying for them.' (Dalrymple to Court of Directors, 24 October 1768 (IOR: E/1/51, p. 84b)).

²⁰ The Strait of Malacca chart in Herbert's *Directory* (see note 29) was dedicated, by permission, to the Court of Directors, but neither this, nor Henry Gregory's imprint address 'near the India-House, Leaden-Hall Street, London' in later editions, amounted to an official *imprimatur* from the Company.

²¹ *General Introduction to the Charts and Memoirs* 1772, p. xii.

²² John Thornton, *The English Pilot, The Third Book* (London, 1703 and later editions). Dalrymple used part of the introduction of *An Account of the Navigation between India and the Gulf of Persia* 1786,

pp. xxiv-xxx, to compare editions: this revealed that by 1786 he owned copies of the 1703, 1741, 1748 and 1750 editions, and had access to copies of the 1716, 1723 and 1755 editions. In December 1793 he bought copies of the 1711 and 1716 editions, and later a copy of the 1734 edition from Faden (Manuscript notes by Dalrymple in India Office Library copy of *An Account of the Navigation between India and the Gulph of Persia* 1786 (London, India Office Library: W 4199), p. xxiv: '10th. Decr. 1793. Bought of Dr. Steel ...', and p. xxvi: 'Edit. 1734 Bought of Faden'). Coolie Verner and R. A. Skelton, introduction to John Thornton, *The English Pilot, The Third Book* (London, 1703), facsimile edition (Amsterdam 1970), p. xiv ('List of Editions'), does not include the 1741 edition, though it was among those Dalrymple owned, and a copy was possession of Trinity House, London, in the 1980s (personal information). The later Mount and Page editions were held in little esteem, for example, by C. F. Noble in *The French, and English, Marine Regulations Compared* [1793], p. 3: 'Those who understand the [French] language, and have seen them [the charts in *Le Neptune Oriental* of D'Après de Manneville], must have a despicable opinion, of our India Pilot, with which Messrs. Mount and Page have long imposed on, and picked the pockets of, our Countrymen, and which are only fit for the Grocers and Chandlers Shops, or posterior uses.'

²³ *An Account of the Navigation between India and the Gulph of Persia* 1786, p. xxiii; *The Nature and Properties of the Winds and Moussons in the Navigation from England to the East Indies* 1807, advertisement, p. 1.

²⁴ *General Introduction to a Collection of Plans of Ports &c. in the Indian Navigation* 1783, pp. 38-39. The four copies of the 1675 edition were recorded in 1970 in the British Museum, the Admiralty Library, the Cruising Association and the National Maritime Museum (Verner and Skelton, introduction to John Thornton, *The English Pilot, The Third Book*, p. xiv). The present (1992) locations of these copies are: British Library, Ministry of Defence Central Library, Cambridge University Library and National Maritime Museum.

²⁵ *General Introduction to the Charts and Memoirs* 1772, pp. xxxviii-xi; second edition 1786, pp. x-xii.

²⁶ *An Account of the Navigation between India and the Gulph of Persia* 1786, p. xxxi: 'I have not seen any later Edition of Van Keulen, and cannot at present, have recourse to an earlier.'

²⁷ For the editions of *Le Neptune Oriental* see note 16 above. Dalrymple appears to have been disappointed that D'Après did not take the opportunity, in 1775, to revise the charts in the coastal series while having them re-engraved at a new plate size. The National Maritime Museum *Catalogue of the Library, volume 3: Atlases & Cartography*, pt. 1, pp. 222-225, is unfortunately misleading in stating (p. 224) that, in the second edition, new charts were added to those of the original work: no plate from 1745 was re-used in 1775.

²⁸ *Collection of Plans of Ports in the East Indies* 1775, second edition 1782, introduction, p. 27.

²⁹ William Herbert, *A New Directory for the East Indies* (London, 1758); second edition (London, 1759); third edition (London, 1767).

³⁰ *The French, and English, Marine Regulations Compared* [1793], p. 3n.

³¹ The quarto letterpress for the fourth edition of *A New Directory for*

the East Indies bears Herbert's name as compiler, and Gregory's as publisher, with an imprint date of 1775. The folio atlas of the fourth edition is known only with the 1776 date.

³² A new contents leaf was printed for this second issue, listing the Dalrymple plates in continuation of the normal contents. Impressions of Dalrymple's plans were pasted onto blank leaves.

³³ H. Cornwall, *Observations upon Several Voyages to India* (London, 1720).

³⁴ Manoel Pimentel, *Arte de Navegar* (Lisbon, 1762). This edition is cited in *An Account of the Navigation between India and the Gulph of Persia* 1786, p. xxx.

³⁵ N. Bellin, *Petit Atlas Maritime* (Paris, 1764).

³⁶ *General Introduction to the Charts and Memoirs* 1772, p. xi.

³⁷ *General Introduction to the Charts and Memoirs* 1772, pp. xi-xxxvii.

³⁸ For example, 'The Plan of Quedah [Catalogue B239 810817b Quedah Road] I received from Capt. Ashbridge in 1776', and 'The Plan of Martavan [Catalogue B194 801017 Martavan River] I found amongst my Charts when they arrived from India, it was new to me, and I can give no account of it' (*General Introduction to a Collection of Plans of Ports &c. in the Indian Navigation* 1783, pp. 76-77).

³⁹ See note 72 below. Dalrymple's books, papers, and charts eventually returned to London in 1780 and 1781.

⁴⁰ *Notwithstanding the many years that the Europeans have navigated to India ...* 1779. Dalrymple put much of the substance of this notice in his letter of 9 April 1779 to D'Après (AN: Marine 3JJ 341(19)), and sent an early version to Herbert on 10 April (J. Nichols, *Illustrations of the Literary History of the Eighteenth Century*, 8 vols. (London, 1817-1858), vol. iv, p. 545). A copy of the notice as issued went to D'Après on 4 May (AN: Marine 3JJ 341(19)).

⁴¹ *Notwithstanding ...* 1779, p. 1. In his letter of 9 April to D'Après, Dalrymple estimated that there were 1200 deposited journals for the period from 1700 to 1779.

⁴² *Notwithstanding ...* 1779, p. 1: 'The Late Improvement in Navigation, by Time Keepers and Lunar Observations, will tend very much to correct the Errors of the Charts; but as the use of these is not universal, it will be a very acceptable Information to receive Notice what Ships have made a constant Series of Observations, either by the Moon or Time Keeper; I would have the Tracks so regulated laid down directly; ...'

⁴³ *Notwithstanding ...* 1779, p. 1 '... for the assistance of such Persons as may be willing to take the trouble of reducing the observations into columns, I will deliver them Papers properly ruled with all the columns which I could wish filled up.' These journal forms were issued with a second pamphlet *The East India Company having thought proper to employ me ...* in May 1779 (see note 47 below).

⁴⁴ Dalrymple to D'Après, 9 April 1779 (AN: Marine 3JJ 341(19)): '... to promote in future the Observations necessary to compleat the Charts ... It occurs to me the most expedient means of doing this is by publishing Charts containing the Outlines, to be delivered to each Ship to be filled

up occasionally: I mean to add in these Charts every circumstance I can find established by positive Data, to enable Men to judge what further Observations are wanting either to correct or to compleat the Charts.'

⁴⁵ *A Comparison of the several Tracks of the Company's Ships ... 1778* (Catalogue A54).

⁴⁶ East India Company, Court Minutes, 21 January 1778 (IOR: B/93, p. 513). An example of this graduated chart has been identified, with tracks in the Atlantic Ocean added in manuscript by Dalrymple (see Catalogue B135 780000 Blank Chart).

⁴⁷ *The East India Company having thought proper to employ me ... 1779*, p. 1.

⁴⁸ Examples of the engraved journal forms have been found with copies of the pamphlet in Paris and Stockholm (see Catalogue A60). Dalrymple sent copies to D'Après with the pamphlet in his letter of 10 June 1779 (AN: Marine 3JJ 341(19): 'I have sent ... also a specimen Sheet of the Form in which the East India Company have ordered the Journals of their Ships to be kept.'). The pamphlet and the specimen forms are filed separately at AN: Marine 3JJ 1(29). The other examples known to have survived are those in the collection of the Swedish Royal Academy of Sciences now in the University Library, Stockholm.

⁴⁹ *The East India Company having thought proper to employ me ... 1779*, p. 8, gives longitudes for 36 places, against 28 in *A Comparison of the several Tracks of the Company's Ships ... 1778*, p. 7. For a discussion of the 1779 list, see Andrew S. Cook, 'Alexander Dalrymple and John Arnold: Chronometers and the Representation of Longitude on East India Company Charts', *Vistas in Astronomy* 28 (1985), pp. 189-195, which prints (p. 193) the 1779 list without its authorities.

⁵⁰ *Notwithstanding ... 1779*, p. 3.

⁵¹ Catalogue B37 720915 Bay of Bengal.

⁵² Dalrymple to Court of Directors, 8 April 1779 (East India Company, Miscellaneous Letters Received, 1779 (IOR: E/1/64, p. 77)); East India Company, Court Minutes, 7 July 1779 (IOR: B/95, p. 161); Catalogue B146 790511a Brazil, and B147 790511b Brazil continuation. Dalrymple offered proofs of two other maps at the same time: see Catalogue B143 790301 Choromandel, and B141 781001 Itchapour.

⁵³ See chapter 3, p. 83 above.

⁵⁴ *General Collection of Nautical Publications* 1783, p. 6.

⁵⁵ Dalrymple to Court of Directors, 8 April 1779 (East India Company, Miscellaneous Letters Received, 1779 (IOR: E/1/64, p. 77)): 'I am well aware that, in every Undertaking of the kind proposed, The Labours of the First Year are the greatest, & make the least shew, so that I must, in the opinion of Men who are not fully apprized of the Nature of the Work, be exposed at the end of the year to the imputation of having done little.'

⁵⁶ *Collection of Views of Land and of Plans of Ports in the East-Indies* 1781, introduction, pp. 2-3 (see Catalogue A70).

⁵⁷ Catalogue B154 790728f Strait of Mallacca views 1, B156 790930a Strait of Mallacca views 2, B155 790728g Strait of Mallacca views 3, and B157 790930b Strait of Malacca views 4.

⁵⁸ Catalogue B161 791109 Western India views, B174 800221 Mozambique Channel views, B175 800301a Malabar Coast views 1, B176 800301b Malabar Coast views 2, B177 800301c Malabar Coast views 3, and B179 800317 Strait of Singapore views. See also Dalrymple to D'Après, 10 August 1779 (AN: Marine 3JJ 341(19)).

⁵⁹ Catalogue B150 790728b Brazil views; Catalogue B151 790728c Grenville views, B158 791001 Grenville views, and B167 791210 Fort St George views.

⁶⁰ Catalogue B198 801125 Simons Bay, and B183 800424 Cochin China.

⁶¹ Catalogue B145 790420b Yambo Harbour, B159 791025 Tor, and B162 791110 Suez.

⁶² Catalogue B163 791120 Praslin, B166 791205 Seychelles, B172 800127 Eagle Island, B165 791201b Malloodoo Bay, B149 790728a Borneo, and B168 791222 Ballambouang Bay.

⁶³ Catalogue B145 790420b Yambo Harbour, and B144 790420a Tien-pe-hien.

⁶⁴ *Collection of Views of Land and of Plans of Ports in the East-Indies* 1781, pp. 1-8 ('Tienpe'). Dalrymple printed extracts from the manuscript journal of the Queen at IOR: L/MAR/B/356E.

⁶⁵ *Collection of Views of Land and of Plans of Ports in the East-Indies* 1781, pp. 1-24 ('False Bay'). The Anvil Rock had been one of his first subjects of correspondence with D'Après de Mannevillette in 1767 (see note 11 above).

⁶⁶ *Collection of Views of Land and of Plans of Ports in the East-Indies* 1781, pp. 1-24 ('False Bay'), especially p. 19.

⁶⁷ *Collection of Views of Land and of Plans of Ports in the East-Indies* 1781, pp. 1-24 ('False Bay'), especially pp. 19-24.

⁶⁸ East India Company, Court Minutes, 14 July 1779, 30 July 1779, 15 October 1779, 31 December 1779, and 10 May 1780 (IOR: B/95, pp. 169, 204, 288, and 394; B/96, p. 66). For the running account for disbursements, see East India Company, General Ledgers, 1779-1811 (IOR: L/AG/1/1/24-29).

⁶⁹ East India Company, Court Minutes, 7 June 1780 (IOR: B/96, p. 131), referring to the Committees of Correspondence and of Shipping a letter of 20 May from Dalrymple. East India Company, Court Minutes, 12 July 1780 (IOR: B/96, p. 199), confirming Dalrymple's appointment. Dalrymple printed this confirmation first in *Collection of Views of Land and of Plans of Ports in the East-Indies* 1781, introduction, pp. 1-2.

⁷⁰ *Collection of Views of Land and of Plans of Ports in the East-Indies* 1781, introduction, pp. 1-2. Dalrymple's obligation to supply the Company was increased from 50 to 100 impressions, the cost met, as before, from the separate allocation for disbursements. Dalrymple submitted his account for £618.12s.9d. for expenditures in this first year, and had the excess over £500 adjusted, it seems, when the account was brought to the Company's General Ledgers in 1783 (East India Company, General Ledger O (IOR: L/AG/1/1/24)). The account was passed by the Court of Directors (East India Company, General Commerce Journal, 1779-1785 (IOR: L/AG/1/6/18)) and brought to the ledger on 31 July 1783.

⁷¹ East India Company, Court Minutes, 26 July 1780 (IOR: B/96, p. 215). The matter was referred to the Committee of House, and the result not reported back.

⁷² East India Company, General Correspondence, Despatch to Madras, 23 December 1778 (IOR: E/4/868, pp. 287-288). Dalrymple to D'Après, 10 June 1779 (AN: Marine 3JJ 341(19)): 'The East India Company have sent orders to Madrass that all my Books, Charts, Papers &ca. be sent home in the first Ship dispatched from thence.'

⁷³ East India Company, Court Minutes, 26 September 1780 (IOR: B/96, p. 299).

⁷⁴ East India Company, Court Minutes, 22 February 1781 (IOR: B/96, p. 668).

⁷⁵ See chapter 3, p. 85, above.

⁷⁶ *Collection of Views of Land and of Plans of Ports in the East-Indies* 1781, introduction, p. 3 (see Catalogue A70). Dalrymple's account for 1780-81 amounted to £459.1s.5½d., passed for payment on 31 October 1781 (East India Company, General Ledger O, 1779-1785 (IOR: L/AG/1/1/24)). The account was passed by the Court of Directors on 31 October 1781 (East India Company, General Commerce Journal, 1779-1785 (IOR: L/AG/1/6/18), and Court Minutes, 31 October 1781 (IOR: B/96, p. 409)) and brought to the ledger on 28 February 1782.

⁷⁷ Catalogue B216 810317b Tristan da Cunha, B218 810409 Ascension I, and B219 810411 Fernando Noronha; *Memoir of a Chart of the Southern Ocean* 1769, p. 4; Dalrymple to D'Après, 31 January 1769 (AN: Marine 3JJ 340(4)).

⁷⁸ *Collection of Views of Land and of Plans of Ports in the East-Indies* 1781 (Catalogue A70).

⁷⁹ Catalogue B235 810801a Cape Arubah.

⁸⁰ *Collection of Charts, Views of Land and Plans of Ports in the East Indies* 1783, introduction, pp. 1-2 (see Catalogue A80).

⁸¹ *Remarks on the Bloachee, Brodia and Arabian Coasts* 1781, *A Voyage in the Flying-Eagle from Bantam to Timor* 1781, *Journal of the Jane ... from Banjar to Timor* 1781, and *Journal of Ship London ... along the North Coast of Magindanao* 1781 (see Catalogue A66-A69).

⁸² *Collection of Charts, Views of Land and Plans of Ports in the East Indies* 1783, introduction, pp. 3-4 (see Catalogue A80). For the Brazil charts, see note 52 above, and Dalrymple's letter to D'Après, 6 October 1778 (AN: Marine 3JJ 341(16)).

⁸³ See Catalogue A80. The expenditures for 1781-82 were £369.17s.2½d., and for 1782-83 £559.13s.9½d. The accounts for disbursements for 1781-82, 1782-83 and 1783-84 were passed together by the Committee of Accounts on 3 November 1784 (East India Company, General Commerce Journal, 1779-1785 (IOR: L/AG/1/6/18)), and brought to ledger on 30 November 1784 (East India Company, General Ledger O, 1779-1785 (IOR: L/AG/1/1/24)).

⁸⁴ See Catalogue A89.

⁸⁵ Though not stated in the 1780 confirmation, this was among the conditions proposed (and provisionally accepted) in 1779 (*A Collection of Plans of Ports in the East Indies* 1775: Second edition 1782,

introduction, p. 29).

⁸⁶ *Collection of Charts, Views of Land and Plans of Ports in the East Indies* 1783, introduction, pp. 4-6 (see Catalogue A80). Though engraved earlier, the charts, views and plans were not formally published until 1783 (*General Introduction to a Collection of Plans of Ports &c. in the Indian Navigation* 1783, p. 15). For the appellation 'Eastern sea charts by special order', see East India Company, General Commerce Journal, 1779-1785 (IOR: L/AG/1/6/18), correcting, in the running account for general disbursements, a small accounting error in the 'special order' account. See also note 89 below.

⁸⁷ *Memoir concerning the Passages to and from China* 1782 (Catalogue A72). The only example known of the secret 1782 first edition survives in the National Archives of India, having been sent as an enclosure to a secret letter from the Court of Directors to the Governor-General of Bengal in January 1783 (C. H. Philips and B. B. Misra (ed.), *Fort William-India House Correspondence, volume xv: Foreign and Secret 1782-1786* (Delhi, 1963), pp. 20-37. The East India Company secret records in London are imperfect for this period.

⁸⁸ See Catalogue A76. From the order of the reprinted text of *Memoir concerning the Passages to and from China* in Philips and Misra, *Fort William-India House Correspondence, volume xv*, pp. 20-37, it appears that, in the National Archives of India example, a copy of *Strait of Allas* was bound in after the title-page of the *Memoir*.

⁸⁹ East India Company, Court Minutes, 13 March 1782 (IOR: B/97, p. 671). The payment was for disbursements in connection with 'charts, views and plans of the Eastern Seas'.

⁹⁰ From 1779-80 to 1782-83, treating the 'special order' series, as Dalrymple did thereafter, as equivalent to an extra 'annual' publication.

⁹¹ *General Collection of Nautical Publications* 1783, p. 13.

⁹² Dalrymple to D'Après, 10 August 1779 (AN: Marine 3JJ 341(19)).

⁹³ *Collection of Views of Land and of Plans of Ports in the East-Indies* 1781, introduction, pp. 3-4. Dalrymple received pencil, ink and wash views sent to him by ships's captains, gathering them into albums. One such album, containing views chiefly (though not exclusively) in the Eastern Archipelago between 1779 and 1794, survives as London, British Library [BL]: Eg. 854 ('Dalrymple's Charts and Headlands').

⁹⁴ *A Collection of Plans of Ports in the East Indies* 1775, second edition 1782, pp. 38-39; *General Collection of Nautical Publications* 1783, pp. 12-16.

⁹⁵ Usually only when connected with charts and memoirs, for example the plate of views (Catalogue B351 831211 Arabia/Dofar views) to accompany *Memoir of a Chart of the East Coast of Arabia* 1783 (Catalogue A87) received from John Smith with his chart (Catalogue B344 831001 Arabia/Dofar). Similarly for Blair's survey of the Chagos Archipelago, the views (Catalogue B537 871221 Chagos Archipelago views) accompanied *Remarks and Observations in a Survey of the Chagos Archipelago* 1788 (Catalogue A149) and its charts (Catalogue B536 871127 Chagos and B538 871225 Chagos Archipelago). McCluer's views in the Laccadives (Catalogue B666 910720 Laccadives views) went with his chart showing the Laccadives (Catalogue B660 910531b Malabar Coast) and plans (Catalogue B659 910531a Kalpeni Islands, B661 910531c

Seuheli Islands, and B662 910531d Underoot Island) to illustrate pp. 18-31 of *Continuation of the Description of the Coast of Malabar* 1791 (Catalogue A180). The plate of views in the Chagos Archipelago (Catalogue B418 841027 Chagos views), as a collection of views from various sources, was an exception, connected with Dalrymple's work on plans in that area in 1784 (see pp. 123-124 below). The expense of engraving plates of views was also a consideration in apportioning the annual allowance for disbursements: Dalrymple postponed publication of the views associated with one of Thomas Forrest's voyages because 'They are so many in number, that they cannot be published so speedily as they deserve, as engraving them would amount to a very considerable Sum.' (*A Journal of the Esther Brig ... from Bengal to Quedah* 1788, postscript, p. xi).

⁹⁶ See chapter 2, p. 61, and chapter 3, p. 79 above.

⁹⁷ See chapter 3, pp. 97-98, n. 66 above. Gregory also republished in 1777 Dalrymple's letterpress *A Collection of Plans of Ports in the East Indies* 1775 (see Catalogue A44).

⁹⁸ *Collection of Views of Land and of Plans of Ports in the East-Indies* 1781, advertisement after title-page.

⁹⁹ *List of Plans of Ports &c.* 1783 (Catalogue A79) is usually, though not always, found bound after the title-page of *Collection of Charts, Views of Land and Plans of Ports in the East Indies* 1783.

¹⁰⁰ Catalogue B306 820825 Baroche, B143 790301 Choromandel, and B141 Itchapour.

¹⁰¹ Catalogue B136 780915a Gingi view, B137 780915b Outatour view, B138 780915c Tanjour city view, B139 780915d Tanjour palace view, and B140 780915e Tricolour view.

¹⁰² *A Collection of Plans of Ports in the East Indies* 1775: second edition 1782 (Catalogue A75).

¹⁰³ Dalrymple had originally omitted compass rays (or 'Rhomb lines') from his plans, but supplied a compass-rose plate with *A Collection of Plans of Ports in the East Indies* 1775, to enable users to mark rays on the 1774-75 plans if they wished. From his first publication for the Company he began the practice of engraving that part of each ray which fell between the neatline and the border of the plan. This allowed users to mark rays, without needing a compass-rose plate. Before 1783, and probably before 1781, Dalrymple had modified as many as possible of his 1774-75 plates to incorporate this additional convenience. Two plates without separate neatlines did not lend themselves to this modification: see Catalogue B82 740630 Gingerah, and B100 740810 Bongo Bay. The plates of views from 1774-75 (Catalogue B81 740505b Sumatra views, and B105 741010 No Nassau views) similarly went unmodified. Two plans (Catalogue B48 740205k Mohila, and B68 740225j Nattal) were withdrawn as unsatisfactory, and two others (Catalogue B50 740205m Point Romania, and B51 740205n Po Pinang) were replaced with new engravings (Catalogue B269 820102 Point Romania, and B265 811217d Po Pinang). For Dalrymple's notes on these changes, see *A Collection of Plans of Ports in the East Indies* 1775: second edition 1782, introduction, pp. 1-3.

¹⁰⁴ *Nautical Memoirs and Journals* 1789, p. 4.

¹⁰⁵ See Catalogue A82-A84.

¹⁰⁶ *General Collection of Nautical Publications* 1783, notice following half-title page; *Nautical Memoirs and Journals* 1789, p. 4: 'The Introduction to Charts was never printed.'

¹⁰⁷ *General Collection of Nautical Publications* 1783, pp. 3-4.

¹⁰⁸ *List of Plans of Ports &c.* 1783 was the first list to include, undifferentiated, Dalrymple's 1769-1772, 1774-1775, 1778 and 1779-1783 charts, plans and views. The 'special war list' items were included, and the only omissions were three plans of the Natunas and Anambas (Catalogue B253 811019a Anamba Islands, B255 811020 Natunas Islands, and B264 811217c Natunas Islands) still treated as part of the private Carimata Passage chart project, and a small-format chart (Catalogue B338 830501 Pora) about to be published.

¹⁰⁹ *General Introduction to a Collection of Plans of Ports* 1783, pp. 17-30. The descriptive and provenance notes (pp. 31-104) were re-assembled, with minimal editing, from: *A Collection of Plans of Ports in the East Indies* 1775: second edition 1782, introduction, pp. 12-26; *Collection of Views of Land and of Plans of Ports in the East-Indies* 1781, introduction, pp. 4-14; and *Collection of Charts, Views of Land and Plans of Ports in the East Indies* 1783, pp. 7-36.

¹¹⁰ Samuel Dunn, *A New Directory for the East Indies*, fifth edition (London, 1780). Folio atlases from the augmented 1783 issue include a separate contents page, at the end of the normal sequence of atlas plates for the Dalrymple plates: 'An Index to the Charts, Plans of Ports, and Harbors, Views, &c. by A. Dalrymple, Esq.' This lists 119 'items' or pages, often with three or four plan plates to a page, over the 'imprint': 'Printed from 230 Copper Plates, on Imperial Paper, and now first Published in one large Volume, and Sold by Gregory and Wright, No. 148, Leadenhall-Street, near the India-House.' For examples of the augmented *New Directory*, see Paris, Bibliothèque Nationale [BN]: Ge.CC.1125; and København, Det Kongelige Bibliotek: St.fol.20.1783. These two copies are of similar make-up, with similar discrepancies from the printed list and from the known extent of Dalrymple's collection as published up to April 1783.

¹¹¹ See note 95 above.

¹¹² See note 106 above.

¹¹³ Catalogue B350 831110 Guzarat.

¹¹⁴ Catalogue A88.

¹¹⁵ *Memoir of a Chart from St. John's ...* 1784, p. 2. The list of sources includes Catalogue B235 810801a Cape Arubah.

¹¹⁶ Catalogue B352 831221a Scindy/Cranchy, B353 831221b Scindy/Prettie, B356 840102 Scindy, B360 840121 Guzarat, and B365 840315 Gogo.

¹¹⁷ Catalogue B454 850403 Straits of Sunda & Banka; *Memoir of the Chart of the Straits of Sunda and Banka* 1786 and *Appendix to Memoir of Chart of Sunda and Banka* [1786] (Catalogue A104-A105). Dalrymple presented the chart and two memoirs to the Court of Directors on 7 April 1786 (East India Company, Court Minutes, 7 April 1786 (IOR: B/102, p. 966)).

¹¹⁸ *Memoir of a Chart of the Straits of Sunda and Banka* 1786,

pp. 11-12: Catalogue B472 860113 Hector, B471 860110 Mascarin, B474 860127 Elephant, B475 860128 Borneo, B470 860101 Lingen (the chart from Van Keulen) and B479 860224 Straits of Malacca and Banka.

119 *Proposition for a Survey of the Coast of Choromandel* 1784 (Catalogue A92), also issued in *An Hydrographical Journal of a Cursory Survey of the Coasts and Islands in the Bay of Bengal* 1784 (Catalogue A93).

120 *An Hydrographical Journal of a Cursory Survey of the Coasts and Islands in the Bay of Bengal* 1784 (Catalogue A93).

121 *Collection of Nautical Papers concerning the Bay of Bengal* 1785, p. iv.

122 *Collection of Nautical Papers concerning the Bay of Bengal* 1785, p. iii. For a list of the charts, see Catalogue A94. Twenty of the charts have scales of 10 or 20 nautical miles to 1 inch: three only, of Chittagong River and nearby channels) are at plan scales of $1\frac{1}{4}$ nautical miles to 1 inch or 1.6 inches to 1 nautical mile (see Catalogue B446 850118 Khaut Colley, B452 850214b Chittegan, B456 850414 Islamabad). For Dalrymple's system of scales and their relationships, see chapter 7, p. 222 below.

123 Cook, 'Alexander Dalrymple and John Arnold', p. 192, where Dalrymple's influence in drafting paragraphs for official despatches to Bombay is discussed.

124 *Instructions concerning the Chronometers ... sent to Bombay* 1786 (Catalogue A112).

125 Dalrymple published the resulting charts of the Malabar Coast between 1788 and 1791: Catalogue B578 881117 Malabar Coast, B609 891107 India & Guzarat, B655 910524 Malabar Coast, B660 910531b Malabar Coast, and B663 910627a Malabar Coast.

126 Catalogue A117.

127 Catalogue B486 860529 Muscat, B490 860620 Persian Gulph/Muscat, B498 860820 Gulph of Persia, and B544 880125 Gulph of Persia.

128 Listed in 'Year 8 Addenda 2' to *List of Classes into which are distributed the Plans of Ports &c.* 1786 (Catalogue A147). The group of seven maps and charts of the entire Persian Gulf (Catalogue B515 870107 Golf of Persia/Thornton, B517 870207 Gulph of Persia/Niebuhr, B518 870217 Gulph of Persia/D'Après, B520 Gulph of Persia/Van Keulen, B521 870227 Gulph of Persia/Kempfer, B522 870314 Gulph of Persia/Harvey, and B527 870428 Gulph of Persia/Friend) were reduced to the standard scale of 75 nautical miles to 1 inch for academic comparison, not for navigation, despite being issued in the plans series. The larger-scale charts of the shipping routes (Catalogue B499 860827 Gulph of Persia, B500 860829 Gulph of Persia, B523 Gulph of Persia/Russell, and B525 870412 Persia) and the plan of the rivers at the head of the Gulf (Catalogue B529 870505 Euphrates) were included because of their differences, both from each other and from McCluer's charts (*An Account of the Navigation between India and the Gulph of Persia* 1786, introduction, pp. xxi-xxii).

129 See chapter 3, pp. 84-86 above.

130 The *Granby* and the *Vansittart* were ships in the first and second fleets returning from China in 1781. For their journals, see IOR:

L/MAR/B/499D (*Granby*) and L/MAR/B/46E (*Vansittart*). The journal of the *Nonsuch*, Capt. Richardson, was sent to Dalrymple privately, with views of land (*Memoir of the Chart of the Natunas, Anambas and adjacent Islands* 1786, p. 14), and is not present in East India Company, Marine Records (IOR: L/MAR/B series).

¹³¹ See Catalogue B187 800600 Carimata Passage. For the copy with the overlay slip, previously in the collection of the Service Hydrographique de la Marine, see BN: SH Pf.183, Div.1, p.3.

¹³² See Catalogue A113. A useful explanation of the steps in Dalrymple's reasoning is in *Memoir concerning the Passages, at a Late Season, from India to China* 1788, p. v: '... a Chart, constructed by me some years ago, ... I have since engraved it, but the Publication has been stopped, because I was doubtful of some of the positions: however, in 1786, I published a Memoir concerning this Chart, at which time I made a separate Plate of the Natunas, &c. and laid down upon it the Track of the Van Sittart, from a MS. by Mr. Robertson, with some other Tracks, which had given reason to believe. that the relative position of the Natunas with Carimata, and the West Coast of Borneo, was not truly ascertained, in the first Chart I had constructed; ...'.

¹³³ *Memoir of the Chart of the Natunas, Anambas and adjacent Islands* 1786, p. 20: 'When the Chart was constructed, my Journal and Views, of the Cuddalore's Voyage in 1761, were in India, so that I could not have recourse to them, ...'.

¹³⁴ Catalogue B470 860101 Lingen, B471 860110 Mascarin, B472 860113 Hector, B473 860115 Chinabata, B474 860127 Elephant, B475 860128 Borneo, B478 860201 Glatton, B479 860224 Straits of Malacca & Banka, and B480 860227 Clements Strait.

¹³⁵ Dalrymple to Fleurieu, 4 September 1783 (Paris, Bibliothèque de l'Institut de France [BIF]: MS. 2325 (NS cccxxv), 16). The correspondence continued until at least 1788: most of Dalrymple's letters, and some of Fleurieu's draft replies, are to be found in BIF: MS. 2325 (NS cccxxv), 16-28, and AN: Marine 2JJ 102, and Marine 3JJ 60.

¹³⁶ Dalrymple to Fleurieu, 2 March 1784 (BIF: MS. 2325 (NS cccxxv), 20).

¹³⁷ See Catalogue B354 840000 Madagascar. The copper plate passed to the Admiralty Hydrographic Office after Dalrymple's death, and was subsequently destroyed. For impressions taken before the plate was destroyed, see Taunton, Hydrographic Office [HO]: A13 in folio A. The unfinished Madagascar chart could not have extended to include the Chagos Archipelago within its predetermined limits, but Dalrymple had in mind in 1785 to make a chart for the islands (*Memoir concerning the Chagos and Adjacent Islands* 1786, advertisement).

¹³⁸ Catalogue B392 840709 Cargados Garajos, B393 840710 John de Nova, B396 840804 Cargados Garajos, B397 840805 Elizabeth/Picault, B398 840811 Islands NE of Madagascar, B399 840814a Chagos, B400 840814b Salomon, B406 840917a Albadra, B407 840917b Eagle, B408 840917c Pos dos Banhos, B410 840922 Pitt, and B412 840926 Bassas de Chagos.

¹³⁹ Dalrymple to D'Après, 27 September 1771 (AN: Marine 3JJ 340(6)): 'I cannot think the pieces I have, at sundry times, sent to you are by any means sufficient, with what You have otherwise obtained, to compleat

a Chart of the Islands & Banks to the N.E. of Madagascar.' The geography of this area was an ongoing subject between Dalrymple and D'Après: Dalrymple had announced a small-scale chart of the Mozambique Channel at the same time as his 1779 scheme (*Notwithstanding ...* 1779, p. 3), and worked on it during 1779. Dalrymple to D'Après, 10 December 1779 (AN: Marine 3JJ 341(19)): '... I have made considerable Progress in a Chart of the Mozambique Channel which I shall communicate as soon as it is finished.' He was contemplating in January 1780 what he might next tackle when he had completed it (Dalrymple to D'Après, 21 January 1780 (AN: Marine 3JJ 341(19))).

¹⁴⁰ Dalrymple to Fleurieu, 6 April 1784 (BIF: MS. 2325 (NS cccxxv), 25): 'In the Chart I am at present engaged upon from 26°.S to 0°.30'N including the East Coast of Africa, Madagascar & the Islands &ca as far Eastward as Rodrigue I am at some loss to determine whether Islands &ca seen by English Ships are the same M. D'Après has introduced from the Observations of French Navigators: The Particular Plans of Those Islands &ca. mentioned by M. D'Après might facilitate my conclusion: He mentioned to have been in possession of the following Plans: Viz: Plan of the Islands to the WSW of the Seychelles by M. de la Biolière 1772; Plan of the Cargados Garayos or St Brandon by the Boat Charles & Tartan Elizabeth 1742; Plan of Cargados Garayos & Islands by Chevalier Grenier; Plan of Aldabra called John de Nova by the Charles & Elizabeth 1742; Plan of Cosmoledo by Mr Morphrey 1756; Plan of John de Nova by M. Margaro 1776; Plan of Diego Garcia by M. de la Fontaine 1776; Plan of Pedro Banhos Laurence Picault 1744.'

¹⁴¹ Catalogue B392 840709 Cargados Garajos, B393 840710 John de Nova, B395 840713 Diego Garcia, B396 840804 Cargados Garajos, B397 840805 Elizabeth/Picault, and B406 840917a Aldabra.

¹⁴² *Memoir concerning the Chagos and Adjacent Islands* 1786, advertisement, p. ii.

¹⁴³ Dalrymple to D'Après, 27 September 1771, 15 November 1771, 29 November 1771, and 20 March 1772 (AN: Marine 3JJ 340(6)-(7)).

¹⁴⁴ East India Company, Court Minutes, 16 November 1784 (IOR: B/100, p. 603): Dalrymple's letter of 27 October enclosed 'a Memorial concerning the Island Chagos or Diego Garcia'. For Dalrymple's publication of D'Après' chart in August 1784, see Catalogue B398 840811 Islands NE of Madagascar.

¹⁴⁵ William A. Spray, 'British Surveys in the Chagos Archipelago and Attempts to form a Settlement at Diego Garcia in the late Eighteenth Century', *The Mariner's Mirror*, 56 (1970), pp. 59-76, especially p. 64.

¹⁴⁶ East India Company, Court Minutes, 11 April 1785 (IOR: B/100, p. 1137): 'The Request of Mr. Alexander Dalrymple to know whether he may Publish the Plans of Chagos Island or Diego Garcia' was referred to the Committee of Shipping.

¹⁴⁷ Particularly the survey made in the *Drake* in 1774 (Catalogue B394 840712 Chagos), to be printed from the same plate as La Fontaine's plan of 1770, which Dalrymple had received from Fleurieu (Catalogue B395 840713 Diego Garcia; see note 140 above). Also held back was the plate of the track of the *Calcutta* (Catalogue B416 841022 Calcutta/Chagos).

¹⁴⁸ In March 1786 (Spray, 'British Surveys in the Chagos Archipelago', p. 65). These three plates appear in the 'Year 7 Addenda' to *List of*

Classes into which are distributed the Plans of Ports &c. 1786 (see Catalogue A116), which suggests a real issue date of April-June 1786.

149 See Catalogue A99.

150 See Catalogue B442 850000 Cape Mons. The copper plate passed to the Admiralty Hydrographic Office after Dalrymple's death, and was subsequently destroyed. For impressions taken before the plate was destroyed, see HO: A20 in folio A.

151 *Memoir of a Chart from Cape Mons to Acheen* 1785, p. 11; see Catalogue B350 831110 Guzarat.

152 *Memoir of a Chart from Cape Mons to Acheen* 1785, p. 11. This manuscript map is not otherwise known.

153 *Memoir of a Chart from Cape Mons to Acheen* 1785, p. 12. The extent of the river pattern shown suggests that the 'Hydrographical Map' may have been Dalrymple's engraving of Barnard's Madras Lands map (see Catalogue B143 790301 Choromandel) or a derivative of that map.

154 See Catalogue B37 720915 Bay of Bengal.

155 *Memoir of a Chart of the Indian Ocean* 1787 (Catalogue A123).

156 Dalrymple to Fleurieu, 28 February/2 March 1787 (AN: Marine 2JJ 102(7)).

157 Washington, D.C., Library of Congress [LC]: G1059.D23(3a/49r); G1059.D24(5/7).

158 The composition of the annual collections of plans after 1783 is deducible for 1783-84, 1784-85 and 1785-86 (Dalrymple's years 5, 6 and 7) from the year codes against entries in *List of Classes into which are distributed the Plans of Ports &c.* 1786 and from the 'Year 7 Addenda' to the same work (Catalogue A115-A116). For subsequent years to 1793-94 the annual addenda sheets to *List of Classes* provide precise lists of plans. From 1789-90 to 1793-94 the addenda sheets to *List of Charts, Plans of Ports, &c.* 1789 and *Nautical Memoirs and Journals* 1789 jointly (for example, *Charts, Views, and Plans, &c.* [1791-1792] 1792 (Catalogue A186)) show new publications in all categories. No such convenient annual lists exist for charts, views and nautical memoirs between 1782-83 and 1789-90. A publisher's advertisement in *Postscript to Mr. Dalrymple's Account of the Gentoo Mode of Collecting the Revenues* 1785 provides quantities for 1783-84 (2 charts, 37 plans including 11 small-format charts, 1 plate of views, and 2 memoirs) and 1784-85 (1 chart, 67 plans and small-format charts, 1 plate of views, and *Collection of Nautical Papers concerning the Bay of Bengal* 1785 with two constituent memoirs). Thus in 1783-84 were published: *Memoir of a Chart of the East Coast of Arabia* 1783 (Catalogue A87) with chart and views (Catalogue B344 831001a Arabia/Dofar, and B351 831211 Arabia/Dofar views); *Memoir of a Chart from St. John's on the Coast of India to Cape Arubah on the Coast of Persia* 1784 (Catalogue A88) with chart (Catalogue B350 831110 Guzarat); *Explanations to Plans of Ports &c.* 1784. The plans bear publication dates between 7 February 1783 and 9 May 1784, with one outlier at 1 December 1784 (Catalogue B333-B377 (with exceptions) and B429).

159 Dalrymple to Fleurieu, 30 July 1784 (BIF: MS. 2325 (NS cccxxv), 24): 'I have this day, from the Collection of Governor Hornby just

returned from Bombay, added above 100 MSS, Maps Charts & Plans, of India chiefly between Cape Comarin and Guzarat; amongst the rest is the whole MS of the Cochin Rivers which You were so obliging to search for in vain.'

¹⁶⁰ Catalogue B401 840825a Dewgur Harbour, B405 840911 India/Arnol Island, B409 840920 Vingorla, B411 840924 Danno River, B413 841007a Collack River, B414 841007b Nunsaree River, B415 841017 Angassee River, B417 841026 Gundivee River, B419 841030a Bulsaur River, B420 841030b Omersary River, B421 841101a Chaoul, and B443 850111 Manhora River. See also Catalogue B655 910524 Malabar Coast (for plan of Tellicherry).

¹⁶¹ For example, Catalogue B680 911027 Sirengampatanne (see chapter 9, p. 251 below).

¹⁶² Spray, 'British Surveys in the Chagos Archipelago', pp. 67-74, criticises the administrative difficulties under which Blair had to operate.

¹⁶³ *Remarks and Observations in a Survey of the Chagos Archipelago* 1788 (Catalogue A149); Catalogue B536 871127 Chagos, B537 871221 Chagos Archipelago views, B538 871225 Chagos Archipelago, and B541 880116 Peros Banhos. In this case the chart, plans and views are called for in an advertisement in *Remarks and Observations*.

¹⁶⁴ Catalogue B387 840620 Fort Dauphin 1, B382 840527b Port Dauphin 2-3, B383 840530 Fort Dauphin 4-5, and B389 840627b Port Dauphin 6-7; Catalogue B379 840520a Foul Point 1-2, B385 840607 Foul Point 3-5, and B384 840601 Foul Point 6-7.

¹⁶⁵ *General Introduction to a Collection of Plans of Ports* 1783, p. 54: 'The various Plans of Foul Point in my possession are extremely different; I shall endeavour to make out one as compleat as I can from the whole. The Plans of Port Dauphin, are no less different, I shall take as the Basis that published by M. D'Après from the Observations of M. Mengaud de la Hage, and insert, in the best manner I can, the contents of the Rest, there must be an error in the Scale of that published by M. Le Gentil, or in all the rest.' In neither case did the materials permit Dalrymple to achieve his objective.

¹⁶⁶ Catalogue A152. For the geographical concentrations in the plans series for 1787-88, see *List of Classes into which are distributed the Plans of Ports &c.* 1786 [Year 9 Addenda 1788] (Catalogue A155).

¹⁶⁷ Catalogue A96 and A133; see note 87 above.

¹⁶⁸ George Robertson, *A Short Account of a Passage from China* (London, 1788). For the chart Robertson criticised, see Catalogue B34 710419 China Sea. Dalrymple's rejoinder was based on his subsequent attempts to use a ship's track supplied by Robertson to position the Natunas correctly on his Carimata Passage chart (*Memoir concerning the Passages, at a Late Season, from India to China* 1788, p. v; see note 132 above).

¹⁶⁹ *Remarks on a Passage from Po. Wawoor, to the Strait of Sunda* 1789; *Account of the Passage of the Ship Atlas ... to the Eastward of Banka* 1789; and *Account of the Passage of the Ship Warren-Hastings ... by the Macklesfeild Strait* 1789 (Catalogue A157-A159). For the respective charts, see Catalogue B585 890124 Carnatick, B588 890217 Atlas, and B589 890218 Warren Hastings.

170 See the publications in note 179 below, and, for example, Catalogue B598 890801 Mintow Road, B826 970107a Lusipara, B827 970107b Strait of Banka 1, B828 970107c Strait of Banka 2, and B928 020117 Strait of Banka.

171 Catalogue A186. For the charts see Catalogue B561 880507b Mergui Archipelago 1, B562 880509 Island St Mathew 2, and B560 880507a Aladin Islands 3.

172 Catalogue A174. For the chart see Catalogue B630 900709b Vlamings Road.

173 Catalogue A204. For the chart see Catalogue B755 940630 Pulicat Shoals.

174 Cook, 'Alexander Dalrymple and John Arnold', p. 192, n. 51.

175 *Description of the Coast of India* 1789 (Catalogue A166); *Continuation of the Description of the Coast of Malabar* 1791 (Catalogue A180). For the charts, plans and views, see: Catalogue B609 891107 India & Guzarat, B610 891127 Bancoot River, B611 891202 Jaffrabat, B612 891205 Searbett Island, B624 900223 Bancoot River, and B625 900228 Demaon (1789-90); Catalogue B660 910531b Malabar Coast, B663 910627a Malabar Coast, B626 900317 Diu Island, B648 910330 Radjapore River, B659 910531a Kalpeni Islands, B661 910531c Seuheli Island, and B662 910531d Underoot Island (1790-91); and Catalogue B666 910720 Laccadives views (1791-92).

176 *Memoir of a Chart of the Passage to the Eastward of Banka* 1806, second introduction, pp. i-ii; East India Company, Court Minutes, 18 March 1789 (IOR: B/108, p. 1097).

177 *Memoir of a Chart of the Passage to the Eastward of Banka* 1806, second introduction, pp. ii-vi.

178 For Lestock Wilson's journal of the *Vansittart*, see East India Company, Marine Records (IOR: L/MAR/B/46H).

179 See Catalogue B695 920317 Banka, and, for a detail, Catalogue B652 910513 Banka. All except the title-page and first preliminary gathering of the memoir was set in type by about 1792, in the founts and layout style of George Bigg, Dalrymple's regular printer. A few copies circulated in this form (for example, LC: G1059.D23 Text 2(13), and BL: G.2197.(2.)), before Dalrymple had a title-page and preliminary material printed by William Ballintine to go with sheets from the 1790s printing of the text for publication as *Memoir of a Chart of the Passage to the Eastward of Bangka* 1806 (Catalogue A229).

180 Dalrymple transmitted to Dundas extracts of the letters he received from McCluer: Dalrymple to Dundas, 2 November 1792 (Dalrymple Letters (Canberra, National Library of Australia [NLA]: MS.43/12)), enclosing copy extract of McCluer's letter from Bencoolen, 25 May 1792 (Melville Papers (NLS: MS.1068, ff. 40-53)); Dalrymple to Dundas, 3 February 1794 (Dalrymple Letters (NLA: MS.43/14)), enclosing copy extract of McCluer's letter from Palau Islands, 23 January 1793 (Melville Papers (NLS: MS. 1068, ff. 56-65)); copy of letter from Dalrymple to East India Company Secret Committee, 21 December 1795, enclosing copy extract of McCluer's letter from Bencoolen, 16 May 1795 (Melville Papers (NLS: MS. 1068, ff. 86-96)).

181 Catalogue B716 921120 Panther, B717 921206 Panther, and B721

930208 New Guinea. This last chart, though engraved, was not published: in May 1808 Arrowsmith was accused of soliciting a proof from Dalrymple's engraver (chapter 5, p. 190, n. 35 below).

¹⁸² R. I. Ruggles, 'Governor Samuel Wegg: Intelligent Layman of the Royal Society 1753-1802', *Notes and Records of the Royal Society of London* 32 (1978), pp. 181-199, especially p. 197.

¹⁸³ Ruggles, 'Governor Samuel Wegg', p. 197, quoting from *Memoir of a Map of the Lands around the North Pole* 1789 (Catalogue A164).

¹⁸⁴ Catalogue B590 890324 Snug Corner Cove, B591 890329 America/North West Coast, and B592 890404 Scott's Bay. Cox also supplied Dalrymple with plans of American harbours from other sources: Catalogue B582 890114 Monterey, B583 890117a Bucareli, B584 890117b Port Sn Francisco, and B671 910826 Oonalaska. For the connections between India and the north-west coast of America in the 1780s, see Barry M. Gough, *Distant Dominion: Britain the the Northwest Coast of North America, 1579-1809* (Vancouver, 1980), chapter 5.

¹⁸⁵ Catalogue B602 891004c Port Etches, B604 891015b Port Brooks, B605 891015c Rose's Harbour, B607 891023 Calamity Harbour, B613 891217a Ahouset, B614 891217b Port Stephens, B615 891224 Milbank's Sound, B616 891229 Port Safety, B619 900101 Nova Hibernia, and B620 900114 Strait Juan de Fuca.

¹⁸⁶ Catalogue A160 and A164.

¹⁸⁷ Catalogue B617 900000a Hudson's Bay. The only impression known to survive is London, Public Record Office [PRO]: CO.700/Canada.42. The map appears to have been derived from the same body of information as 'Map of the Lands around The North Pole' (Catalogue B593 890504 North Pole), but at a larger scale.

¹⁸⁸ Catalogue B641 910114 Clioquot, and B657 910527b Clioquot.

¹⁸⁹ J. P. Buache de la Neuville, 'Eclaircissemens géographiques sur la Nouvelle Bretagne et sur les côtes septentrionales de la Nouvelle Guinée', *Mémoires ... de l'Académie Royale des Sciences*, published with *Histoire de l'Académie Royale des Sciences ... 1787* (Paris, 1789), pp. 128-147.

¹⁹⁰ Catalogue B8 690000a Papua.

¹⁹¹ Catalogue A172.

¹⁹² Catalogue B622 900208 Insulae Moluccae, and B533 870824 Antient MS.

¹⁹³ *Considerations on M. Buache's Memoir concerning New-Britain* 1790, advertisement, pp. i-ii, gives a list of the maps Dalrymple engraved and published to illustrate his argument: see Catalogue B8 690000a Papua, B633 900917 America/Ortelius, B640 910101 Asia/Arcano del Mare, B631 900801 New-Guinea, B636 901104 New-Guinea, B639 901217 Princesa, and B635 901101 Bougainvilles Strait.

¹⁹⁴ Catalogue B650 910507a Mozambique Channel/Bellin, B651 910507b Mozambique Channel/Thornton, B654 910520 Suffalo & Moçambique, B656 910527a Mozambique Channel, and B658 910529 Moçambique Channel. These are not known to be connected with any letterpress.

¹⁹⁵ See chapter 9 below.

196 Catalogue A201. For the plans, see Catalogue B734 931212a Port Louis, B737 940103 Mauritius, B740 940129 Bourbon, B741 940204a Isle de France, and B743 940210 Mauritius. These were the same five plans which Dalrymple offered to the Court of Directors, with *Collection of Papers concerning the Navigation, Winds and Weather, at the French Islands Mauritius and Bourbon* 1794 (see Catalogue A201), in March 1794 (IOR: B/118, p. 859 (Court Minutes, 5 March 1794), in part-fulfilment of his publishing responsibility to the Company for 1793-94. Catalogue B735 931212b Rodrigues, remote from the immediate area, was engraved at the same time.

197 Catalogue A199.

198 East India Company, Court Minutes, 7 April 1786 (IOR: B/102, p. 965). Though such events had usually passed unnoticed as a matter of routine, the Court of Directors minuted Dalrymple's next delivery of 100 impressions of eight plates (East India Company, Court Minutes, 18 August 1786 (IOR: B/103, p. 465)).

199 Most obviously in cross-advertisements in *A Retrospective View of the antient System of the East-India Company* 1784 (Catalogue A90) and *Postscript to Mr. Dalrymple's Account of the Gentoo Mode of Collecting the Revenues* 1785 (Catalogue A97), the second of which summarised the publications available in April 1785. A similar cross-advertisement appeared later in *Mr. Fox's Letter to His worthy and independent Electors of Westminster, fully considered* 1793 (Catalogue A193).

200 *List of Classes into which are distributed the Plans of Ports &c.* 1786 (Catalogue A115). The eighteen geographical areas were maintained for the organisation of Dalrymple's plans until at least 1794, when the last addenda sheet was issued. Thereafter the concept was retained, though the number of classes was increased, particularly in the Eastern Archipelago: when Dalrymple summarised his East India Company publication for the Admiralty in 1804, he enumerated the plans in twenty-three classes (Dalrymple to [? Marsden], 21 June 1804 (PRO: ADM.1/3522)).

201 *A Collection of Plans of Ports in the East Indies* 1775, introduction, pp. 2-5 (Catalogue A44); *Collection of Views of Land and Plans of Ports in the East-Indies* 1781, introduction, pp. 2-3 (Catalogue A70); *Collection of Charts, Views of Land and Plans of Ports in the East Indies* 1783, pp. 1-6 (Catalogue A80); *General Introduction to a Collection of Plans of Ports &c. in the Indian Navigation* 1783, pp. 17-30 (Catalogue A83).

202 Addenda sheets, for 1785-86 to 1793-94, to *List of Classes into which are distributed the Plans of Ports &c.* 1786 (Catalogue A116, A146-A147, A155, A161, A170, A182, A187, A195, and A206).

203 See BL: 6.TAB.48.(3.) for an example in a presentation set of letterpress, and Oxford: Bodleian Library: 5.A.196 and Göttingen, Niedersächsische Staats- und Universitätsbibliothek: 4° H.As. II, 112 for examples used as contents lists to collections of plans.

204 Samuel Dunn, *New Directory for the East Indies*, sixth edition (London, 1787).

205 Gregory supplied no contents pages, after the engraved title-page, for either issue of the *Directory*. Evidence from copies suggests that the sixth edition is unusual in being found more frequently with

impressions of the Dalrymple plates than without them.

206 Catalogue A162-A163.

207 Charts were to be sold at prices from 2s.6d. to 6s. each or at 2 guineas a set, views at 2s. each or at 2 guineas a set, and plans at 6d., 1s. or 2s. each, depending on size and the amount of view engraving, or at 6 guineas a set.

208 The memoirs were priced individually or in small related groups, from 6d. to a guinea. The complete collection was offered at 6 guineas, or at a reduction of 3 guineas to purchasers of complete sets of charts, views and plans.

209 *Charts, and Plans, &c.* [1789-90] 1790 (Catalogue A169); *Charts, and Plans, &c.* [1790-91] 1791 (Catalogue A181); *Charts, Views, and Plans, &c.* [1791-92] 1792 (Catalogue A186); *Charts, and Plans, &c.* [1792-93] 1793 (Catalogue A194); and *Plans, &c.* [1793-94] 1794 (Catalogue A205).

210 Conclusive evidence of this is difficult to find, and can justifiably be sought only in the two surviving collections in the India Office Records thought to have been made up in this way from the first 100 impressions. See, for example, IOR: X/3627/2/350v and X/3627/2/351 for impressions, bound side-by-side, from two states of a plate, the second with an added inset plan (Catalogue B185 800501a Alligator Bay).

211 See chapter 7, p. 226 below.

212 East India Company, Court Minutes, 3 August 1785 (IOR: B/101, p. 282). As *Collection of Charts and Memoirs* 1772 with its introduction and six constituent memoirs had been published first before 1779, it was not a new work, and the Company had consequently no right to claim 100 copies.

213 Catalogue A103 and A106-A111. The two additional items were *China Seas* [1787], a postscript to *Memoir of a Chart of the China Sea* 1771: Second edition 1786, giving a list of known shoals (Catalogue A124), and *Mr. Larkins's Observations concerning the Chart and Passage from St. John's to the Ladrone* [1787] (Catalogue A141). Very few undismembered sets of this group of memoirs lack these additions, and the late publication date of 1787, taken from *nautical Memoirs and Journals* 1789, should be treated cautiously. The Court of Directors received 20 copies of Larkins' chart (Catalogue B476 860130 St Johns) on 3 February 1786 (East India Company, Court Minutes, 3 February 1786 (IOR: B/102, p. 742)), and it is unlikely that the associated four-page memoir was far behind. Unlike the practice of 1771, the charts, views and plans called-for in *General Introduction to the Charts and Memoirs* were not automatically supplied with the second edition of the memoirs in 1776: they were theoretically available from stock as separate items.

214 Catalogue A119 (*A Brief Statement of the Prevailing Winds* 1782: Second edition 1787), A125 (*Memoir of a Chart of the East Coast of Arabia* 1783: Second edition 1787), A126 (*Remarks on the Bloachee, Brodia, and Arabian Coasts* 1781: Second edition 1787), A127 (*Memoir of a Chart from St. John's on the Coast of India to Cape Arubah on the Coast of Persia* 1784: Second edition 1787), A129 (*Memoir of a Chart of the Bay of Bengal* 1772: Second edition 1787), A130 (*Collection of Nautical Papers, concerning the Bay of Bengal* 1785: Second edition

1787), A131 (*An Hydrographical Journal of a Cursory Survey of the Coasts and Islands in the Bay of Bengal* 1784: Second edition 1787), and A132 (*Appendix to Capt. Ritchie's Survey of the Bay of Bengal* 1785: Second edition 1787).

215 Catalogue A133 and A134. *Appendix to Memoir of Chart of Sunda and Banka* [1786] (Catalogue A105) was also issued in a complete re-setting, but whether to accompany the first or the second edition of its parent *Memoir* is not clear.

216 Catalogue A143 (*A Collection of Plans of Ports in the East Indies* 1775: Third edition 1787), A144 (*Collection of Plans of Ports in the East-Indies* 1781: Second edition 1787), and A145 (*Explanations to Plans of Ports &c.* 1784: Second edition 1787).

217 Catalogue A125 (*Memoir of a Chart of the East Coast of Arabia* 1783: Second edition 1787), A127 (*Memoir of a Chart from St. John's on the Coast of India to Cape Arubah on the Coast of Persia* 1784: Second edition 1787), A133 (*Memoir concerning the Passages to and from China* 1782: Third edition 1787, and A134 (*Memoir of the Chart of the Straits of Sunda and Banka* 1786: Second edition 1787). There is unfortunately no surviving correspondence which might illuminate the details of this private transaction between Dalrymple, Bigg and Gregory.

218 *A Collection concerning the Bay of Bengal* 1787 (Catalogue A128) is known only with a Gregory imprint. The one example found (Cambridge, University Library: Hanson.b.148¹⁶) is used to cover copies of Catalogue A129-A132 (see note 214 above).

219 See Catalogue A135-A140 and A142. For this third edition the *China Seas* list of shoals (see note 213 above) was incorporated in the register of *Memoir of a Chart of the China Sea* 1771, third edition 1787. The memoir *Mr. Larkins's Observations ...* (Catalogue A141; see note 213 above) was totally re-set for this 1787 edition of the memoirs.

220 This implies only that Dalrymple and Gregory sold stocks in parallel from their concurrent editions.

221 Samuel Dunn, *New Directory for the East Indies*, re-issue of sixth edition of 1787 (London, 1790).

222 Dalrymple submitted his report on 8 August 1783 (East India Company, Court Minutes, 13 August 1783 (IOR: B/99, p.319)), and published it immediately as *An Account of the Loss of the Grosvenor Indiaman* 1783 (Catalogue A81), with a second edition and an appendix in 1785 (Catalogue A100-A101).

223 Dalrymple was elected on 31 July 1777 with Musgrave and Roy (London, Royal Society: Royal Society Club, Dinner Book 6).

224 Helen Wallis, 'Publication of Cook's Journals: Some New Sources and Assessments', *Pacific Studies* 1 (1978), pp. 163-194, especially pp. 177-182. For examples of the depth of Dalrymple's involvement in the detail of the project, see his letters to Banks of 12, 13 and 15 December 1783 (Banks Papers (NLA: MS.9/55-57)).

225 Tony Campbell, 'A Cook Mystery Solved', *The Map Collector* 32 (1985), pp. 36-37.

226 *Case of Alexander Dalrymple, Esq.* 1784 (Catalogue A91).

227 *A Serious Admonition to the Publick on the Intended Thief-Colony*

at *Botany Bay* 1786 (Catalogue A118). The pamphlet embodies Dalrymple's letter of 13 July 1785 to the Court Directors, in answer to their request for his opinion. It was the subsequent publication of the letter as a pamphlet which appears to have been unsolicited.

228 Dalrymple to Cathcart, 20 July 1787, enclosure in Cathcart to Pitt, 25 July 1787 (Chatham Papers (PRO: PRO.30/8/121, ff. 225-228).

229 'Mr. Dalrymple's opinion on the Route across the Continent of America', 2 February 1790 (PRO: CO.42/72, ff. 249-256).

230 *The Spanish Pretensions Fairly Discussed* 1790 (Catalogue A168); *The Spanish Memorial of 4th June Considered* 1790 (Catalogue A171).

231 *An Historical Journal of the Expeditions, by Sea and Land, to the North of California* 1790 (Catalogue A173).

232 Dalrymple to Dundas, 12 March 1791 (Dalrymple Letters (NLA: MS.43/7)): 'Mr. Dalrymple begs to caution Mr. Dundas not to mention any thing to indicate that Mr. Dalrymple knew the particulars of the Examination of Lieut. Meares before the Privy Council.'

233 Memoir concerning Places of Refreshment for the Whale Ships in the South Seas, 14 April 1792 (PRO: ADM.1/4156). This formed part of a packet of Plantations correspondence which Nepean sent to Stephens, at Dundas' request, on 1 August 1792.

234 See note 180 above.

235 Despite occasional illness and absence from London, Dalrymple attended almost 700 of the 950 weekly dinners between his election and the end of 1795, an attendance rate of 73 per cent. His pattern of attendance did not significantly alter thereafter.

CHAPTER 5

'A PROPER PERSON FOR THAT OFFICE':*

THE ADDITIONAL RESPONSIBILITY FOR THE HYDROGRAPHICAL OFFICE OF THE ADMIRALTY

The Order in Council creating the office of Hydrographer to the Admiralty was dated 12 August 1795,¹ and Dalrymple took up the post from the following day.² The justification for establishing a Hydrographical Office was clear: there was a lack of reliable information available to ships of the Fleet to navigate safely in the waters where the demands of war might direct them. It was the availability, not the quality, of the data which was the first difficulty:

On a cursory examination of the plans and charts which have from time to time been deposited in the office, we find a considerable mass of information, which, if judiciously arranged and digested, would be found of the greatest utility to Your Majesty's Service; but from want of a proper establishment for the execution of this duty, Your Majesty's Officers are in a great measure deprived of these valuable communications.³

The responsibilities of the office were equally clearly defined, in the proposal of the Admiralty Board:

that a proper person should be fixed upon to be appointed Hydrographer to this Board, and to be intrusted with the custody and care of such plans and charts as now are, or may hereafter be, deposited in this office belonging to the public, and to be charged with the duty of selecting and compiling all such information as may appear to be requisite for the purposes of improving the navigation, and for the guidance and direction of the Commanders of Your Majesty's ships, in all cases wherever any knowledge in this respect may be found to be necessary.⁴

Dalrymple later claimed that he owed his appointment to Earl Spencer, First Lord of the Admiralty from November 1794.⁵ But the sequence of events which identified the position and the man to fill it owed much to the chain of Admiralty appointments in March 1795: Sir Philip Stephens rose from the Secretaryship to a seat on the Board, Evan Nepean became

Secretary, and William Marsden was introduced as Second Secretary.⁶

All three had long connections with Dalrymple, either through the Royal Society and the Royal Society Club, or (in Nepean's case) in the conduct of colonial business in the Home Office.⁷ Dalrymple was already undertaking an investigation for Nepean in February 1795, using East India Company ships' journals to compare journey times between England and the Cape by the Guinea Coast route, via St. Helena, and by the westerly route.⁸ In May 1795 he was compiling a portfolio of material on the Scilly Isles at Stephens' request, including engraved charts and views and printed tide tables.⁹ Though nothing is known to have survived of this exercise, except a composite from impressions of three plates forming the chart,¹⁰ it is a reasonable conjecture that the Scilly Isles exercise may have been a 'test piece' for Stephens to use in support of the Admiralty Board's proposal for a hydrographical office. Dalrymple was not currying favour: in his letters to both Stephens and Nepean he criticised the Admiralty's habitual tardiness in paying accounts, and Marsden smoothed the matter by offering to take the payment personally to Dalrymple's bankers.¹¹ The significance of these matters is that the papers concerning them, though dating from before the Order in Council, were filed by the Admiralty from the beginning as 'Hydrographer's Correspondence'. Business between Dalrymple and successive Secretaries was carried on by letter, though with Marsden the style was naturally informal.¹² The epistolary medium suited Dalrymple for official correspondence: he had been used to it for many years in his official dealings with the East India Company.

When Dalrymple was offered the post of Hydrographer, in June 1795, he first sought the East India Company's approval.¹³ Though he had been receiving an annuity, or pension, from the Company since April 1791,¹⁴ his remuneration by the Company for 'examining the ships' journals' did not cease,¹⁵ and he had gone on publishing charts and plans. He was

aware that he would continue to owe the Company some part of his time and declined the secretaryship of the Board of Longitude, which the Admiralty Board had originally intended the Hydrographer also to fill.¹⁶ Dalrymple's publications for the East India Company had continued in annual instalments until June 1794,¹⁷ but partly because of the departure of his chief writing engraver, William Harrison, for Philadelphia, and the death or retirement of George Bigg, his letterpress printer,¹⁸ his work for the next two years was characterised by series of incomplete or unpublished exercises. In the summer of 1794 Dalrymple had begun to have engraved the delayed plates of views of land to accompany his publication of John McCluer's *Description of the Coast of India*, and went on to similar series of views of land for McCluer's *Account of the Navigation from India to the Gulph of Persia* and for his own voyage of 1760 on the Cochin-China coast.¹⁹ He had planned a series of charts to cover the Andaman Islands, from Archibald Blair's survey, as well as plans of harbours and channels, and had had a number of plates engraved.²⁰ This was the largest series of contiguous plates he had executed since the 1770s. The writing, including the title and lengthy explanation, on the northern sheet was engraved with the chart 'south to the top', not matching the orientation of the sheets for Middle and South Andaman. The northern sheet also failed to connect with the other two, and this necessitated an additional slip plate to bridge the gap.²¹ The writing was engraved on all four plates, but the expedient was unsatisfactory and neither these nor the plans of harbours were formally published until after Dalrymple's death.²² Dalrymple did not draw from the Company his annual advance for expenses for 1795-96, and ceased to claim it regularly after 1798.²³ He continued to publish charts and plans for the Company after 1795, accounting annually,²⁴ but their numbers were fewer and the internal coherence of the annual instalments less marked.²⁵

The demands of Dalrymple's new appointment were quite unlike his Company position. His first responsibility was the organisation of a hydrographic collection which had accumulated, until Dalrymple's arrival, in the care of a clerk.²⁶ Dalrymple was immediately faced, at the age of 58, with the task of running an office with subordinate staff, a position quite different from the personal appointment by the Company 'for examining the ships' journals' which he had executed practically alone. He secured the appointment of Aaron Arrowsmith as his assistant, from 7 September 1795 at a salary of £100 a year,²⁷ his own salary being fixed at £500 a year in the same month.²⁸ According to one account a draughtsman was also employed at £50 a year.²⁹ The work of the new department was first to sort, classify and arrange the materials collected, and then to evaluate them to select and compile information for the use of ships. No specific mention was made of printing or publishing charts, though Dalrymple's approach to the East India Company mentioned 'forming and engraving charts'.³⁰ Naval officers conventionally treated the surveys made in the course of duty as their private copyright, and many had their surveys published through the map trade in London. This practice was foreign to Dalrymple's East India Company experience, and he later assembled a list of such publications.³¹ Surveys commissioned directly by the Admiralty Board from appointed surveyors, such as those on the coasts of Britain by Murdoch Mackenzie and Graeme Spence,³² were normally retained and formed the nucleus of the collection in the care of the appointed Admiralty clerk until 1795.³³ It was the lack of a system for co-ordinating and compiling this information, and for disseminating it securely to ships of the fleet, that Dalrymple had first to address.

Investigative work without tangible product, though satisfying to Dalrymple, was less so for his assistant. Arrowsmith was already an established map and chart publisher by the early 1790s,³⁴ and he lasted

barely more than a year as Dalrymple's office assistant. The Admiralty papers are scanty for this period, but there is no suggestion that the parting on 10 November 1796 was not amicable.³⁵ Dalrymple had been sending out draughtsman work, reduction and copying of charts, in 1795 and 1796 to John Walker, an engraver whom he had long employed for his East India Company charts,³⁶ and Walker was formally appointed in Arrowsmith's stead late in 1796 or early in 1797.³⁷ The office complement remained unchanged for the next three years, while the re-organisation continued. The work continued to be wide-ranging: in 1795 and 1796 Walker had been working on charts and plans of the Spanish coast, the North Sea, the Cape of Good Hope, the Texel and Zuyder Zee, and the Bay of Panama and the Isthmus of Darien, besides completing the Scilly Isles views and plans.³⁸ Dalrymple took in the charts and journals of the D'Entrecasteaux voyage, brought to St. Helena by Rossel when the expedition broke up in Batavia, and employed Rossel, then in exile, to compute the results of the observations on the voyage.³⁹ Dalrymple responded to a variety of questions referred to him by Nepean, advising him which of a collection of Danish charts and sailing directions might be copied for the Admiralty,⁴⁰ recommending maps, charts and globes for the Portsmouth Naval Academy,⁴¹ and assessing deviations in the homeward course of the *Sphynx* from St. Helena in 1799 for possible 'sinister motive' on the part of her commander.⁴²

Dalrymple put his private collection and East India Company experience to Admiralty use in June 1798 he advised Marsden on the navigation of the Red Sea, and on the passage time to the Strait of Babelmandel,⁴³ and furnished Commodore Blankett with a set of his charts, plans and memoirs relevant for the expedition of Blankett's squadron, which sailed with orders to counteract any move by the French expeditionary force in Egypt towards India by sea. He invoiced the Admiralty for the

published items, and for copying manuscript accounts and sets of views.⁴⁴ His East India Company function was effectively separate from his Admiralty position, and he had less time to devote to it. Increasingly in the late 1790s Dalrymple's publications for the East India Company were engravings of groups of newly-received material. Common provenance was the controlling factor instead of the common geographical focus of material from a variety of sources, which had been a feature of Dalrymple's 1780s plans series. The groups of charts and plans supplied by Robert Torin, George Palmer, William Layman and Thomas Dunning Lippiatt are in this category.⁴⁵ Other series of charts in these years, each with a single focus, were John Macdonald's Sumatra group, Robert Bentley's plans in the Laccadives, the large-format series of southern India and Ceylon from John Wedgbrough and Samuel Snook, and James Horsburgh's charts of the track of the *Anna*.⁴⁶ Dalrymple used older unpublished items to fill up plates, for example Begbie's view of Annobon to fill up a Guinea coast views plate,⁴⁷ but he no longer regularly carried out research to publish series of representations of particular areas, such as the Madagascar coast and Persian Gulf exercises of 1784 and 1787.⁴⁸ It was inevitable, though, that there should be some cross-fertilisation between Dalrymple's two appointments. Dalrymple's elaborate assistance to Blankett's expedition came two years after Blankett had supplied Dalrymple with a series of new plans of south-west African harbours taken in H.M. Sloop *Star* earlier that year, which he immediately engraved for the East India Company.⁴⁹ The Admiralty's growing interest in the Red Sea in 1798 caused Dalrymple to assemble and engrave a series of plans and views between 1798 and 1800, including much material which had lain unpublished since his 1776 voyage in the *Swallow*.⁵⁰ The publication for the East India Company, shortly after Dalrymple had received in the Admiralty the confidential deposit of the D'Entrecasteaux expedition material, of an isolated plate

of views from D'Entrecasteaux's previous voyage in the *Résolution*, was clearly not coincidental.⁵¹

The first phase of work in the Admiralty Hydrographic Office, the organisation of the existing charts and plans, was complete early in 1800. Dalrymple later referred to it as the time 'when the Hydrographical Office was made efficient in 1800'.⁵² Dalrymple and Walker had organised the materials sufficiently to promise Nepean on 22 March a list of charts and plans in the Office 'fit to be engraved', in answer to a request from the Admiralty Board.⁵³ Nothing more advanced than using the London map trade for engraving and publication appears to have been envisaged by the Board, although in 1808 Dalrymple claimed, in a heated moment, that from its creation:

an avowed Purpose of [the Hydrographical Office] was to publish accurate Charts for The Use of The Royal Navy, which purpose could not ever be carried into effect if MS Charts &ca. given into the Hydrographical Office were delivered to private Chart Sellers to be mixed with other Materials of unknown or doubtful authority.⁵⁴

The earliest documented suggestion that the Admiralty were considering publishing charts on its own account came in Dalrymple's request to Earl Spencer of 21 February 1797 for permission 'after the fact' to treat his publication of three plans of South African bays, received from Blankett, as part of his East India Company series, since they were 'not exactly under a proper form for the Publication from the Hydrographical Office, should anything be published from thence'.⁵⁵ Three years elapsed before Dalrymple's successful application for a press in the Admiralty building, in his letter to Nepean of 22 March 1800:

I am decidedly of opinion that it would be very expedient to fix up a rolling-press in the Admiralty both as least expensive and most convenient if a number of plates are intended to be printed.⁵⁶

The Admiralty Board response was immediate and favourable. On

31 March Dalrymple wrote to Matthew Boulton, the supplier of Dalrymple's private rolling-press in 1774,⁵⁷ with his request, and with a wry aside on the delay of three years:

It is in contemplation to establish a rolling Press at the Admiralty with Iron rollers 32 inches wide. It occurred to me that the Admiralty could be better & cheaper supplied by You than they could here; and I was desired to write to You on the Subject; I'll be much obliged to You to be so good as send me an answer as soon as you can conveniently; ... as 3 Years having been lost in inaction They are now impatient to get to work and I suppose will expect in the 3 months to come as much work done as could have been executed in the 3 years.⁵⁸

Dalrymple 'was desired to look out for Engravers &c.',⁵⁹ and a press was in place later in the same year. The list of charts and plans 'fit to be engraved' has not survived, but it is generally accepted that the first plate printed at the Hydrographical Office was Moore's plan of the island Houat in Quiberon Bay, with a date of November 1800.⁶⁰

The establishment of a rolling-press necessitated changes in the complement of the Hydrographical Office: two plan engravers were employed, John Cooke and Isaac Palmer, both of whom had private businesses outside the Admiralty.⁶¹ Thomas Harmar was employed on piece-work rates as writing engraver, and these three, as well as the two draughtsmen James Andrews and Francis Higgins and the copper-plate printer Richard Baily, were superintended by John Walker on an increased salary as Hydrographical Assistant.⁶² Walker and Harmar had worked for Dalrymple on East India Company charts since the 1780s, and, with Palmer, now formed the nucleus of Dalrymple's new office.

The factors governing the selection of charts to be engraved and printed in the Hydrographical Office are not now known. A distinction was made early between charts to be engraved from manuscript surveys and charts to be copied from foreign printed sources. Dalrymple obtained authority to have charts in the latter category engraved

outside the Office, as not being confidential in character.⁶³ This demonstrates that there was often more work than the engravers could handle, and that the Hydrographical Office press was seen as a security press, not subject to commercial constraints. The capital cost, salaries and materials were borne by the Admiralty, and there was no need or provision for selling charts. Printed charts were issued as 'Ship's Stores', and required to be returned after use.⁶⁴ In May 1803 Dalrymple proposed that multiple copies of unfinished proofs should be sent to ships for evaluation and correction,⁶⁵ and some plates consequently never went beyond the proof stage.⁶⁶ With no contemporary sales catalogue of charts and no surviving register of plates from the first years of the press, assessment of output can be made only from an analysis of surviving impressions, supported by evidence from contemporary correspondence.

The 1801 plan of Alexandria was for some years thought to be the earliest Admiralty chart,⁶⁷ but it is legitimate to see the group of three plates of Alexandria as an office exercise in reducing, engraving and printing. Dalrymple had received from Sir Thomas Troubridge a chart of part of the coast of Egypt drawn by naval officers in 1798 and 1799, and from another source two French manuscript plans of Alexandria.⁶⁸ He had the two French plans engraved and proofed, and the detail from each reduced and inserted, so far as it went, into the Troubridge chart, which was engraved and proofed in turn.⁶⁹ Then the area of the plate between Rosetta and Alexandria was erased and beaten up to receive a new outline and information on troop movements in March 1801 from an additional plan, and the plate proofed again.⁷⁰

The other charts of 1801 and 1802 have little in common: a group of three plates of harbours in southern Africa, two plans of Dutch estuaries, Mackenzie's Falmouth Harbour and Carrick Road, two plans of

bays on Sardinia, a chart of Chios and Smyrna, and a Spanish coastal chart reprinted from Tofino with a parallel British revision.⁷¹ The chart of part of the Spanish coast was engraved at the request of Earl St. Vincent;⁷² specific authorisations to engrave (beyond the missing list of March 1800)⁷³ are not known for the other plates. All were single-source charts or plans, of the type Dalrymple (and his engravers) were accustomed to providing for the East India Company. The size and specifications were similar, and only the inclusion of 'Hydrographical Office' and 'Hydrographer to the Admiralty' in the publisher's imprint indicates the different circumstances of their construction. Late in 1801 Dalrymple demonstrated the capacity of the Hydrographical Office to function as a security press when, as part of the Admiralty's involvement with the surveys being carried out for Philip Gidley King as Governor of New South Wales, he had engraved a sketch from King of Bass Strait with the discoveries made in the *Lady Nelson*, sending proofs to Nepean in January 1802.⁷⁴

Dalrymple had no authority to commission surveys, only to engrave charts from materials supplied by ships' officers, supplemented by manuscripts in the Hydrographical Office and by foreign printed charts.⁷⁵ His best efforts therefore followed, rather than preceded, naval interest in particular areas: the results by mid-1803 included a series of plans of Adriatic harbours from Robert Nelson and the continuation of a series of Sardinia anchorages.⁷⁶ An exception was his successful advocacy in 1805 of a re-survey of Falmouth Harbour. After publishing Mackenzie's survey of Carrick Road in 1802,⁷⁷ Dalrymple issued a plate from Manderson's survey in May 1805,⁷⁸ and wrote to Marsden on 15 June with a sketch showing disagreements between Mackenzie's survey, two plans from Manderson's survey, and another by Lockwood, suggesting that Hurd could easily establish the reciprocal positions of the prominent points on his passage to the

French coast.⁷⁹ Hurd was ordered to do this, and in 1807 or early 1808 Dalrymple had a plate in proof showing Hurd's new survey.⁸⁰

Dalrymple organised the publication of coherent series of charts for the south coast of England. By March 1800 he had identified surveys by Mackenzie missing from, or not yet present in, the Admiralty.⁸¹ The lack of materials in the Admiralty for coherent chart series was a recurring theme for Dalrymple. In recommending to Nepean in 1796 the acquisition of a Danish survey of the Goodwins, he remarked that 'It is not very creditable to us that other Nations should be referred to for our own Coasts.'⁸² The problem remained for Dalrymple throughout his tenure of office: in his report of 10 October 1807 he complained that 'It is a Disgrace to This Country that the Hydrography of our own Coasts is not accurately delineated.'⁸³ This was not an admission of inadequacy but a reflection that Dalrymple had no authority to order surveys and little control over the results. The habit of surveying officers, from the time when no effective Hydrographical Office existed, to retain their surveys, was difficult to break, particularly when, like Spence, they regarded their work as a rolling programme of coastal survey. Dalrymple wrote to both Stephens and Nepean trying to elicit from Graeme Spence his surveys of the Owers and of the coast from Dungeness to Beachy Head.⁸⁴ Spence, also present in the Admiralty working up his surveys, continued to be a source of irritation to Dalrymple, who successfully objected to Spence's practice of altering Mackenzie's sailing directions for the north coast of Kent to match his own more recent observations.⁸⁵ Keeping track of privately published surveys by naval officers was also a continual problem: in October 1807 he produced a list of more than fifty such charts and plans, doubting whether the Admiralty could re-engrave them without infringing private copyright.⁸⁶

Using Mackenzie's and Spence's surveys as a base, Dalrymple began two series of charts for the south coast, an inner series at 3.2 inches to 1 nautical mile for The Solent, Spithead and Southampton Water, and an outer series at 1.6 inches to 1 nautical mile to extend from the Thames Estuary to Sidmouth. These were the first charts for which Dalrymple used the larger (double-elephant) plate size which the Admiralty press could accommodate. In the first series proofs were circulated of the Southampton River and St. Helen's Road sheets, dated 11 October 1802 and January 1805 respectively.⁸⁷ The other two sheets, from Gilkicker Point to Calshot Castle and from Yarmouth and Lymington to Hurst Castle and the Needles, were also engraved to Dalrymple's specifications.⁸⁸ Finished versions of the four sheets were published by Thomas Hurd from Dalrymple's plates in September and October 1808.⁸⁹ The second series, planned in twelve sheets, was more complex. Dalrymple issued the sheets for The Owers and the outer coast of the Isle of Wight in November 1804 and July 1805, and followed these with the Winchelsea to Beachy Head sheet in July 1807, the first two from Mackenzie's and the third from Spence's surveys.⁹⁰ A chart of the Strait of Dover, though not to the series scale, was already engraved in April 1806 from materials in the Hydrographical Office,⁹¹ but Dalrymple had the Dover to Winchelsea sheet, the sheet for The Downs, and at least one of the two Thames Estuary sheets, in preparation for his series shortly afterwards, chiefly from Spence's surveys.⁹² Similarly, at the western limit of the series, the three sheets spanning the coast between Blackwood Point, St. Alban's Head, Abbotsbury and Sidmouth were in preparation from Mackenzie's surveys, 'nearly engraved in the Hydrographic Office'.⁹³ The gap between Beachy Head and The Owers was to be filled by surveys in progress by James Murray in 1807, but Dalrymple was dissatisfied with the the internal inconsistencies and lack of scale in Murray's manuscripts.⁹⁴ The two sheets from Beachy Head to Worthing and from New Shoreham to Selsey Bill were not engraved

until Hurd re-issued the whole series in 1811.⁹⁵ Dalrymple had begun a similar series for the coast from Plymouth to the Lizard, at the smaller scale of $1\frac{1}{4}$ nautical miles to 1 inch: this was published later by Hurd, who was himself surveying the intervening coast from Sidmouth to Plymouth in 1807.⁹⁶

To encourage the transmission of nautical information from ships of the fleet, Dalrymple designed (or revised) in February 1804 a 'Form of Remark-Book', with a covering letter which he clearly proposed should be sent by the Secretary with orders to ships.⁹⁷ This was to give guidance to ships' officers as to the kind of information required about ports visited under headings such as 'Situation', 'Directions for sailing into or out of Ports', 'Anchorages', and extending to 'Trade and Shipping' and 'Inhabitants'. Under Earl St. Vincent, the Admiralty Board sought to revive this system of reporting from disuse, but Dalrymple reported to Marsden in December 1806 that he had received only one such report in almost three years 'and that One of a well known part of the Coast of England, in a exceptionable stile'.⁹⁸ Dalrymple worked under the disadvantage of the reluctance of serving officers to submit plans or reports unless motivated by their own curiosity. Two Sardinia plans came from the master of the *Victory*,⁹⁹ and Lord Nelson visited the Hydrographical Office at least once, with a report of a further shoal discovered in the Esquirques group between Tunis and Sicily.¹⁰⁰ But such exceptions Dalrymple could quickly enumerate: William Durban's plan of the Esquirques and of Lampedusa taken in 1802,¹⁰¹ Joseph Edmonds's 1801 chart of the Formigas rocks off Elba,¹⁰² and Beaufort's plans of Montevideo in 1807¹⁰³ were the examples he called most easily to mind. Of the officers serving in home waters during the early years of the Hydrographical Office, William Bligh was the most sympathetic to Dalrymple's aims. Dalrymple had engraved Bligh's sketch of Smith's Knowl, and his surveys of Dungeness and Walcheren, in 1803.¹⁰⁴ Bligh

was sufficiently conversant with Hydrographical Office procedures to assume temporary responsibility for the office in the spring of 1804, when Dalrymple was ill for six weeks.¹⁰⁵ Later his plans of the Humber and of Dublin Bay were engraved, the latter only to a proof state.¹⁰⁶

Dalrymple made less use of the Admiralty printer, William Bennett,¹⁰⁷ for sailing directions than the quantity of his earlier letterpress printings for the East India Company might suggest. Only his publication of Horsburgh's *Observations on the Navigation of the Eastern Seas* 1797 bears Bennett's Marsham Street, Westminster, imprint,¹⁰⁸ though his *A Collection of English Songs* 1796 was printed by Bennett at 12 Clements Inn Passage, Clare Market.¹⁰⁹ Dalrymple had discussed with him before 1800 the expense involved in setting up a printing press, apparently for letterpress printing in the Hydrographical Office.¹¹⁰ Bennett was out of his post by March 1800, almost certainly in 1799, and died in 1801, aged 33.¹¹¹ George Roberts replaced him and was printing at the Admiralty in 1800.¹¹² Dalrymple used Roberts, at his Angel Court, Charing Cross, address, for at least one item of East India Company printing, *Memoir of a Chart from the Strait of Allas to the Island Bouro* 1799.¹¹³ Roberts' colophon appeared on the Hydrographical Office *Rules and Regulations* which Dalrymple circulated in 1800 or 1801,¹¹⁴ but not routinely on Dalrymple's occasional sheets of nautical instructions.

From 1802 Dalrymple was making increasing use of Navy sources for his East India Company charts and plans. He published individual charts in the Celebes and the Caroline Islands from Volant Vashon Ballard and from the voyage of the *Suffolk* respectively in 1802 and 1803.¹¹⁵

Admiral Blankett's collection of plans was made available to Dalrymple by Sir Thomas Troubridge in 1802, and this resulted in the publication of ten plans, chiefly on the east coast of Africa and in the Red Sea, but

including also charts and plans on the coasts of Java, Cochin China and the Celebes.¹¹⁶ Dalrymple had begun to receive plans from Admiralty during Stephens' secretaryship in 1774,¹¹⁷ but he made use of his dual position in a letter to Marsden in June 1804 to seek to regularise the transmission of information from the Admiralty to the Company:

Be pleased to apply to their Lordships for permission to copy as part of the Collection which I have engraved for the use of The East India Company, the Plans in this Office which concern the East India Navigation: altho' they may be useful to The Company's Ships, they are too few in number to make anything like an Oriental Pilot.¹¹⁸

Dalrymple was already publishing plans from Peter Heywood's 1798-1802 service in the East Indies before he made this application, and by 1807 had used Heywood's charts and plans of Ceylon, southern India, and the Eastern Archipelago for ten plates.¹¹⁹ Apart from an isolated plan of the African Islands from the *Spitfire* in 1801,¹²⁰ and James Downie's plans of Acheen and Point Romania,¹²¹ Dalrymple's other main Admiralty source was Austin Bissell's charts and plans on the east coast of Africa and in the Red Sea as first lieutenant in the *Daedalus* in Blankett's 1798 and 1799 expedition. Bissell's journal, *Voyage from England to the Red Sea* 1806, came to Dalrymple for East India Company publication, as did the drawings for six plans from Zanzibar to Tor and a chart of part of the east coast of Africa.¹²²

Dalrymple's annual publication for the East India Company had dwindled in 1802-1803 to two plans. The material he brought from the Admiralty added significantly to his output in 1804, which was further increased in later years by the unsolicited offer from David Inverarity of eight charts of Madagascar and eastern Africa, published and acknowledged by Dalrymple in *Memoir of a Chart of the N W Coast of Madagascar* 1806.¹²³ The significant piece of evaluative work which Dalrymple published for the Company during his Admiralty tenure was an analysis of the available representations of the southern part of the Strait of

Malacca and the islands to Rhio, in *Memoir of a Chart of the Passages at the Southern Extremity of Asia* 1805.¹²⁴ He brought together data gathered over more than forty years, including his own observations in 1762 and 1763, publishing his source material in the charts and plans series on a series of seventeen charts in 1804 and 1805.¹²⁵ The compilation chart never appeared, and the fact that he had a twelve-page pamphlet on its sources in progress for almost two years¹²⁶ before publication suggests that the demands on his time were heavy. The plates, though intellectually connected with the *Memoir*, were not specifically called for in the text, and are not found with the letterpress.

To increase the number of charts available to the Navy, Dalrymple offered the Admiralty in June 1804 the use of his plates originally engraved for the East India Company:

I beg leave to add that if the Admiralty should wish to supply H. M. Ships with the Plates I have published for the East India Company's Use, about 800 in number, I will very readily, on a reasonable consideration for the use of the Plates, permit any number of copies, Their Lordships may desire, to be printed for the Admiralty, They being at the expence of Paper and Printing.¹²⁷

Dalrymple at that time priced his 52 charts, 57 views and 640 plans at £34.12s.6d. a set or £3462 for 100 sets. Allowing just over £450 for the paper and printing costs to be borne by the Admiralty, he arrived at a figure of £3006.7s.0d. for 100 sets,¹²⁸ but settled with the Admiralty Board for a payment of 1000 guineas.¹²⁹ One hundred copies of 44 charts and 380 plans were completed by Baily by August 1805,¹³⁰ and the job was finished in October 1806.¹³¹ By this means the Admiralty acquired 81,700 impressions, 100 each of 54 charts, 57 views and 706 plans, Dalrymple having included those plates (including the Strait of Malacca series) which he had published since June 1804. Only a few hundred of these impressions survive, mostly bound as atlases in

the Admiralty Library,¹³² and the impressions stamped with the 'Hydrographical Office' foul-anchor oval seal.¹³³

In the same way as he retained the right to reprint from his plates, Dalrymple retained the copyright in his nautical memoirs. Copper plates could easily be put to press again, but the reprinting of letterpress memoirs, without standing type, was an investment venture demanding committed purchasers. When Dalrymple sent Marsden on 4 September 1806 his penultimate report on the printing of charts, views and plans, though his letter did not mention printing memoirs, the endorsed office direction reads: 'Mr. Dalrymple to take the necessary steps for printing the Memoirs connected with and explanatory of the Plates.'¹³⁴ The Admiralty order was for 100 copies of such memoirs as Dalrymple would re-publish, to go with the sets of plates. He explained to the Admiralty Board that presswork was charged in units of 250 copies, after the press had been set up for a job, whatever lesser quantity might be required, and obtained permission to have additional copies printed for his own use at the cost of the paper.¹³⁵ This was the only 'payment' Dalrymple was to receive for the use of his texts, unlike the reprinting of the charts, views and plans, where the largest element of cost was the 1000 guineas composition paid by the Admiralty for the use of the plates. Between the Admiralty order and his request to take run-on copies for private use, Dalrymple offered the East India Company on 10 September the opportunity to take copies at a similar favourable rate:

The expence of printing them will not be $\frac{1}{4}$ of what printing them without this opportunity: as printers, after the press is set up, are only paid for working them off at few shillings p[er] 250.¹³⁶

As these were designated as reprints of texts, in respect of which Dalrymple had long before fulfilled his obligation of 100 copies to the Company, his proposal to charge the Company for any copies they might

require was entirely legitimate. The Court of Directors apparently did not respond,¹³⁷ and this approach was omitted from Dalrymple's introductory account of the re-publication.¹³⁸ But any new nautical publications had to be supplied first to the East India Company in 100 copies, and Dalrymple quite properly proposed, in the case of these, to charge the Company for setting up the press, and to allow the Admiralty to purchase run-on copies at presswork and paper cost. Sir Philip Stephens, to whom the matter was referred, agreed to take the same quantity of these as of the republished items.¹³⁹ Examples of items which came into this category were Bissell's *Voyage from England to the Red Sea* 1806, and Inverarity's *Memoir of a Chart of the N W Coast of Madagascar* 1806.¹⁴⁰

Dalrymple had expected to be informed of the Admiralty Board's choice of which of his old memoirs to reprint, but, when faced with the responsibility himself, divided his nautical publications into 'permanent' and 'temporary' categories. He regarded as 'permanent' publications the surveys and general remarks, citing as examples McCluer's *Description of the Coast of India* 1789 and *Account of the Navigation between India and the Gulph of Persia* 1786, his own memoirs on the passages to China, and Correa's description of the west coast of Luzon, among others.¹⁴¹ He relegated to the 'temporary' category the compilations he had made to support particular charts, such as those of the South Atlantic, the China Sea and the Carimata Passage,¹⁴² where the information, though the best available at the time of compilation, had been superseded, chiefly by chronometer observations. To explain the choice of items for republication, Dalrymple's introduction of November 1806 included a list,¹⁴³ but he continued adding publications in 1807 and early 1808. He revised, amalgamated and augmented his earlier publications quite readily, and did not always continue with the sequence of edition numbers last used in 1787. The printer for this

republishing was William Ballintine, of 9 Duke Street, York Buildings, Strand, whom he also used for the completion of *Oriental Repertory* in 1808, and who, in partnership with Joseph Byworth, continued to print for Hurd after Dalrymple's death.¹⁴⁴

A few examples of these re-issues survive in the Admiralty Library collections, Hurd having taken them from stock to bind with his posthumous re-issues of other Dalrymple memoirs.¹⁴⁵ Dalrymple himself made use of the privately-funded run-on copies, assembling nautical memoirs and charts in area-based collections for the first time in almost forty years of publication. He produced these composite bindings either in small speculative runs or in response to orders: with no printed contents lists there was no consistent make-up, and superficially similar bindings can vary in contents. For this exercise Dalrymple used surviving stocks of older printings of his nautical publications as well as reprints, marrying them with relevant charts and plans from his unused sales stocks, often impressions from early states of the plates, sometimes old proofs, and normally including charts and plans up to 1806 and 1807.¹⁴⁶ Collections assembled in this way are known for the following areas: 'Passage to India',¹⁴⁷ 'Coast of India, Cape Arubah to Cape Comorin',¹⁴⁸ 'Bay of Bengal' (memoirs and charts in two volumes),¹⁴⁹ 'China Sea',¹⁵⁰ and 'Eastern Passages'.¹⁵¹ Collections of charts and plans were also added to particular memoirs for issue in the same way: McCluer's *Account of the Navigation from India to the Gulph of Persia*,¹⁵² McCluer's *Description of the Coast of India*,¹⁵³ Correa's *An Exact and True Description of ... Luzon*,¹⁵⁴ and *Historical Journal of the Expeditions ... to the North of California*.¹⁵⁵ For at least two privileged recipients, William Marsden and Francis Beaufort, Dalrymple arranged comprehensive sets of the letterpress re-publications. Marsden, Dalrymple's longstanding associate and latterly Secretary to the Admiralty, had received a set of the nautical memoirs in 1789,¹⁵⁶ and

Dalrymple presented him with a bound set of his new memoirs in 1807.¹⁵⁷ He maintained Marsden's set of the East India Company charts and plans, and Marsden later marked the four volumes as complete up to Dalrymple's death.¹⁵⁸ Beaufort, as commander of the store-ship *Woolwich* with a voyage to India in prospect,¹⁵⁹ brought himself to Dalrymple's notice in September 1805 with a request to be issued with a chronometer for observations on his voyage.¹⁶⁰ Dalrymple sent him also a list of the areas he would wish to have better surveyed, in particular the coast of the Indian Ocean from Penang to Pegu.¹⁶¹ Later that autumn, in preparation for his departure, Dalrymple sent Beaufort a complete set of his East India Company nautical publications, charts, views and plans he had published up till that time, including proof impressions of many of the unpublished charts.¹⁶² On Beaufort's return from India in 1807, Dalrymple sent Beaufort a further instalment of charts, plans and nautical publications published in his absence, which Beaufort amalgamated with his earlier receipt.¹⁶³ Dalrymple's relations with Beaufort were close in 1807 and 1808: after recommending Heywood and Edmonds in October 1806 to carry out the proposed survey of the Rio de la Plata,¹⁶⁴ Dalrymple extended his backing to Beaufort in April 1807, when the *Woolwich* was ordered to South America, requesting the Navy Board to issue three chronometers for Beaufort's survey.¹⁶⁵ Much of Dalrymple's editorial and publication effort in 1807 was focussed on the Rio de la Plata, in preparation for Beaufort's voyage: *Memoir concerning the Geography of the Countries situated on Rio de la Plata* and *Catalogue of Authors who have written on Rio de la Plata, Paraguay, and Chaco* both resulted from work done before Beaufort's departure,¹⁶⁶ as did the plan of Colonia del Sacramento.¹⁶⁷ The Montevideo venture turned sour with a military defeat in May 1807, and Beaufort arrived in July not to survey new-won coastline but to participate in the evacuation of the Rio de la Plata.¹⁶⁸ Dalrymple published Bouverie's *Directions for the Mouth of Rio de la*

Plata early in 1808,¹⁶⁹ and brought Beaufort's plans of Montevideo at least up to proof stage by May 1808,¹⁷⁰ but these were now an academic exercise.

While publication and re-publication went on, Dalrymple continued to produce charts of European waters for the Admiralty, though his capacity to respond to fleet needs was limited by the long preparation time involved. He furnished Gambier's expedition to the Baltic with sets of commercially published charts and sailing directions in 1807, and included 56 copies of printed Hydrographical Office directions and 59 proof copies of Thomas Atkinson's chart of the Great Belt,¹⁷¹ which serves to show the reliance still placed by the Admiralty on the London chart trade in 1807. Besides the three series he was known to have in progress, the south coast of England, the Channel coast of France, and the waters between the Isle of Wight and Hampshire, most of Dalrymple's charts were single-source harbour plans, such as those of the Humber and of Boston Deepes,¹⁷² and many of these were from foreign printed sources. He still did not compete with commercial publishers in providing small-scale coasting charts. In November 1807 Dalrymple furnished the Admiralty Board with a 'List of Plates engraved, engraving and of Charts and Plans prepared for Engraving in the Hydrographical Office', which, though it does not survive in the Board's correspondence with the Hydrographical Office,¹⁷³ appears to have been one of the source documents for the evaluation of the Office operations which the Chart Committee was to carry out early in 1808.

Dalrymple unwittingly provoked the disagreement with the Chart Committee which eventually led to his dismissal, by openly disclaiming any capacity to judge the merits of charts in waters which he did not know. In May 1807 he had been requested to purchase and arrange 'a compleat Set of all Charts published in England', which he did, so far

as the availability of materials permitted, by October, with a 61-page catalogue of charts.¹⁷⁴ In his accompanying letter to William Wellesley Pole, successor to Marsden as Secretary to the Admiralty, he demurred at the Board's instruction to make a selection of 'the best and most necessary Charts and Plans of Ports' on the grounds that very few privately published charts had accompanying memoirs of authorities, and concluded:-

In the present circumstances, therefore, I cannot presume to decide on the merits of the various Publications, for which The Officers of H.M. Navy at the Board of Admiralty &ca. must, in most cases, be better qualified to judge than I am.¹⁷⁵

This was not false modesty: Dalrymple consistently claimed that he was not qualified to evaluate surveys, only to point out uncertainties or inconsistencies between charts. He had demonstrated the differences in three charts of Falmouth Harbour in 1805, without claiming correctness for any,¹⁷⁶ and in May 1807 he referred for reconsideration the overlap area of two of Murray's new charts of the Sussex coast on the grounds that the soundings did not agree.¹⁷⁷ Pressed again by Pole on 21 November to make a selection of the charts he had listed, he again declined on 24 November:

Be pleased to inform their Lordships in answer to the Letter of 21st which I received last night that I am not competent to make a Selection of Charts as recommended, having no experience in the Navigation of the European or American Seas: ... I beg leave to suggest that the most expedient Mode of making a Selection of Charts for the use of H.M. Navy, would be by a Committee of Officers who have the necessary experience, and it was for enabling the Officers of H.M. Navy to point out where they knew, by experience, Charts to be good or bad, that I recommended printing the Lists.¹⁷⁸

The Admiralty Board appointed a committee of three serving officers, Home Popham, E.H. Columbine and Thomas Hurd, on 27 November.

Popham's and Hurd's reply of 4 December acknowledged Dalrymple's experience, and proposed to examine first the charts of the English Channel, North Sea and Baltic Sea.¹⁷⁹ By mid-December the three captains were writing from the 'Chart Committee Room', their concern

being to find authorities by which to check privately published charts.¹⁸⁰ The Chart Committee's first report, of 27 February, was a detailed examination of Arrowsmith's chart of the North Atlantic Ocean, and of materials to improve it.¹⁸¹ In this they were smug at having evaluated an oceanic chart so rapidly, but were not yet in conflict with Dalrymple, who made no claims for charts he had not produced. The Committee's report was closely followed on 10 March by the promised selection of charts for the Atlantic Ocean, Mediterranean and North Seas, with the estimated costs of four schemes for supplying ships of the fleet.¹⁸² Dalrymple may have received this report from the Admiralty Board, for the annotations and corrections on it appear to be in his hand. It is significant that many charts were recorded as 'nearly engraved', 'manuscript', or 'not finished' in the Hydrographical Office: twenty-six of the English Channel and western approaches, including Mackenzie's Bristol Channel and survey from the Scillies to Plymouth, Hurd's Falmouth, the coast from Plymouth to Sidmouth, Spence's Plymouth Sound, Mackenzie's five sheets from Sidmouth to the Owers and four sheets of The Solent, Murray's three sheets from the Owers to Winchelsea, Spence's The Downs, Johnstone's Boulogne, and four sheets of the French Coast from Dunkirk to St. Malo from Mechain.¹⁸³ Some of these areas were still under survey, by Hurd between Plymouth and Sidmouth and by Murray between the Owers and Beachy Head,¹⁸⁴ but other areas such as Southampton Water, part of The Solent and Boulogne had been in proof for up to six years.¹⁸⁵ Dalrymple pointed out that his small for contingent expenses had to provide for the cost of proofing plates,¹⁸⁶ but the Committee's remarks on their list were a telling criticism of Dalrymple's slow progress. Beyond the Channel there were fewer examples of incomplete work, apart from two charts of the Thames Estuary ('The Swin') only one of which was reported engraved.¹⁸⁷

Dalrymple's disagreements with the Chart Committee did not at first affect his work. He quickly curbed Popham's early intention to have Arrowsmith mount Hydrographical Office manuscript charts on cloth,¹⁸⁸ and he accepted, once proper safeguards were in place, that the Committee should have access to manuscripts in office.¹⁸⁹ When Walker was ordered on occasional secondment to the Chart Committee, Dalrymple pointed out that the output of the Hydrographical Office would be slowed thereby, and began to question what the future relationship of the Chart Committee and the Hydrographical Office would be.¹⁹⁰ The open breach came on 1 April, after John Barrow, as Second Secretary, had sent an informal memorandum to Dalrymple for three sets of charts of the North Sea and Baltic to be mounted and bound in different styles for evaluation in the fleet.¹⁹¹ It was unfortunate that, for speed, Barrow dispensed with the usual form of letter,¹⁹² but Dalrymple's response was instantaneous:

I beg leave to observe that I am neither a Stationer & Bookbinder, an Admiralty Messenger, nor a Clerk in the Hydrographical Office, but Hydrographer to the Admiralty, the Functions of which Office I conceive are defined in the Memorial from the Admiralty to the King in Council and in the Order of His Majesty in Council for establishing the Hydrographical Office, and there is no Fund appertaining to the Office for the purchase of Charts for the Use of the Royal Navy, and it has been usual for the Secretary to order any Charts wanted and to pay for them.¹⁹³

With only a small fund for contingent expenses Dalrymple had to restrict himself to compiling and printing charts from materials in the Admiralty.¹⁹⁴ He had published no charts of the North Sea and Baltic, and to have complied with Barrow's minute would have meant purchasing charts in the London map trade and hiring the services of a mounter and binder. Barrow's and Pole's concept of a Hydrographical Office as a supplies store differed widely from the establishment Dalrymple had set up under Nepean and Marsden. Pole re-routed Barrow's request to the Chart Committee, and their eager compliance on 20 April¹⁹⁵ showed that, where the priority was the supply of publicly available charts, the

Admiralty Board could be effectively served by the Chart Committee. Dalrymple continued in April to put forward complex proposals for quincunx surveys of areas where dangers had been reported,¹⁹⁶ while the Chart Committee received and dealt with the Board's request to assemble sets of charts (including Dalrymple's publication of Inverarity's charts of Madagascar)¹⁹⁷ for Rear-Admiral Bertie's new station.¹⁹⁸ The Chart Committee took the same opportunity on 22 April to press for the adoption of one of its schemes of 10 March, and for the purchase of 100 copies of the charts for the Atlantic, Mediterranean and North Sea, so as to supply the fleet 'without any of the delay that is at present unavoidable'.¹⁹⁹ Though Bertie's charts were ready on 2 May, the Committee's general proposal lay without orders until 10 June.²⁰⁰

This proposal by the Chart Committee to implement one of the schemes of its 10 March report is the most likely, therefore, to have constituted the planned 'new arrangements of the [Hydrographical] Office' which Pole offered at his interview with Dalrymple on 26 April as a propitious circumstance in which he hoped Dalrymple might choose to retire as Hydrographer.²⁰¹ Dalrymple refused and, to demonstrate that he was continuing to conduct official business as usual, immediately sought and obtained from Pole permission to get Bouverie's 'Directions for the Mouth of Rio de la Plata' printed.²⁰² For the first weeks of May two separate lines of activity continued in the Admiralty: Dalrymple, in the Hydrographical Office, continued to compile and prepare for publication material chosen, as before, by himself, specifically Beaufort's chart of Montevideo and Bouverie's 'Directions', and the Chart Committee continuing to survey the state of charting as part of their task to select charts for the Navy. The Chart Committee had, by 26 May, formulated for Pole a severe critique of Dalrymple's unsystematic chart publication:

There are many important parts of the World, of which we have no tolerable Charts Published, the materials to supply the deficiencies, may

in a considerable degree be obtained from Manuscripts, in the Hydrographic Office, and they should be engraved in the Common course of business in that Office, but we fear that little benefit can be expected from that Quarter, unless Their Lordships should be pleased to command Mr. Dalrymple to employ the engravers on such Charts only, and in such a progressive Order, as they might direct. If Their Lordships should think proper, to cause a suitable list to be made out, it would also be advisable, that whoever they might entrust with this duty, should also be authorised to determine the proper Scale, and projection of each; in order to avoid Mr. Dalrymple's circular projection, the impropriety of which, for nautical purposes, it were needless to point out; and his system of Scales, by which many useful surveys have been materially injured.²⁰³

Though illuminating, this was overkill. The flashpoint occurred on 27 May, a consequence of the Chart Committee's request a fortnight earlier to see the security copies which Dalrymple had made of D'Entrecasteaux's charts of New Britain after receiving them in 1795 and before surrendering them to Marsden in 1796 for return to France.²⁰⁴ Dalrymple had kept both charts and astronomical observations under lock and key as material relating to scientific discovery, intending them not be used in England, even in the cause of war, until published in France.²⁰⁵ The circumstances which led the Chart Committee to request the D'Entrecasteaux material are obscure. Until early May the Committee had spent some months evaluating charts of the Atlantic, and though they expressed an intention of considering charts of the Indian Ocean, there is no evidence that they had embarked on this before their 13 May request for a specific body of confidential material of an area as far distant as possible from the Atlantic Ocean. The hypothesis that the Committee was primed to provoke a confrontation is thus difficult to rule out.

The end came suddenly: Dalrymple was removed from office by a decision of the Admiralty Board, communicated by Pole on 28 May.²⁰⁶ The grounds used were the same as those offered him a month earlier, the 'new arrangements' in the Hydrographical Office. In a letter to Melville shortly afterwards, Dalrymple connected his dismissal with the episode of

the D'Entrecasteaux charts:²⁰⁷ he did not see the new plan for the selection, assembly and issue of sets of charts to ships as part of the work of the small Hydrographic Office, already fully occupied in chart compilation and engraving. Dalrymple protested against his dismissal in a pamphlet, and though he continued to meet with friends and associates in the Royal Society Club until 9 June, he died three weeks after his dismissal, on 19 June.²⁰⁸

Dalrymple left behind him a functioning chart compilation, engraving and printing establishment, with a relatively small output of completed charts and a large number of charts in preparation, including two series of the Channel coast and The Solent. With his limited resources he never claimed to compete with commercial publishers in providing the general coasting charts which the Admiralty Board increasingly expected. He had no system of sale or issue of completed charts, and concentrated on the examination of data and on chart construction. He allowed his choice of areas for study largely to be dictated by reports of dangers or by materials to hand. Similarly with printed sailing directions, Dalrymple saw his role as providing particular information to supplement the published works generally available. Dalrymple's East India Company responsibility nominally continued until his death, though his last chart for the Company was almost a year earlier.²⁰⁹ By his reprinting and re-publication exercises Dalrymple had left both the East India Company and the Admiralty with the stocks they had required of his Company publications. In both institutions Dalrymple had left a framework on which his successors, James Horsburgh for the East India Company, and Thomas Hurd for the Admiralty, could build.

NOTES TO CHAPTER 5: 'A PROPER PERSON FOR THAT OFFICE'

* 'When Earl Spencer first intimated to me the intention of appointing an Hydrographer to the Admiralty and did me the honour to think me a proper Person for that Office I observed to His Lordship that I was flattered by his opinion, ...' (Dalrymple to Pole (Secretary to the Admiralty 1807-1809), 23 December 1807 (London, Public Record Office [PRO]: ADM.1/3522)).

¹ Privy Council Registers, Order in Council, 12 August 1795 (PRO: PC.2/144, pp. 51-53). The text is printed by G. H. R[ichards], *A Memoir of the Hydrographical Department of the Admiralty 1868* (London, 1868), pp. 31-32, and reprinted by Sir Archibald Day, *The Admiralty Hydrographic Service 1795-1919* (London, 1972), pp. 334-335.

² Admiralty office note of 22 February 1797, endorsement on Dalrymple's account of 'Disbursements in the Hydrographical Office', 20 February 1797 (PRO: ADM.1/3522): 'Established to commence from the 13th Aug. 1795'. Dalrymple was on his annual visit to Cheltenham at the time of his appointment (*Case of Alexander Dalrymple* 1808, p. 7), but returned to London before September 3, after an unusually short absence (London, Royal Society [RS]: Royal Society Club Dinner Book softbound 5 (1794-1795). Dalrymple's tenure as Hydrographer has been treated summarily by Day, by Howard T. Fry, *Alexander Dalrymple (1737-1808) and the Expansion of British Trade* (London, 1970), especially chapter 9 ('The Hydrographer'), pp. 249-266, by Andrew C. F. David, 'Alexander Dalrymple and the emergence of the Admiralty Chart' in *Five Hundred Years of Nautical Science 1400-1900*, ed. Derek Howse (Greenwich, 1981), pp. 153-164, and by Christopher Terrell, 'Captain Columbine, Alexander Dalrymple and the troubled birth of the British Admiralty Hydrographic Service', in *Guerres et Paix 1660-1815* (Vincennes: Service historique de la Marine, 1987), pp. 245-259. More cursory accounts are to be found in Mary Blewitt, *Surveys of the Seas* (London, 1957), pp. 29-32, in A. H. W. Robinson, *Marine Cartography in Britain* (Leicester, 1962), pp. 102-113, and in D. A. Lanegran, *Alexander Dalrymple: Hydrographer*, Ph.D. Minnesota, 1970, pp. 45-50. All except Lanegran have made use of isolated items in the boxes of Admiralty Board correspondence with the Hydrographical Office (PRO: ADM.1/3522-3523) for the period up to 1809: only David has attempted to correlate items of correspondence with work on particular charts.

³ Order in Council, 12 August 1795 (Day, *The Admiralty Hydrographic Service*, pp. 334-335). For a summary of earlier survey work under Admiralty auspices, see Robinson, *Marine Cartography in Britain*, chapter 6 ('The Birth of Official Hydrography'), especially pp. 96-102.

⁴ Order in Council, 12 August 1795 (Day, *The Admiralty Hydrographic Service*, pp. 334-335).

⁵ Dalrymple to Pole (Secretary to the Admiralty 1807-1809), 23 December 1807 (PRO: ADM.1/3522).

⁶ J. C. Sainty, *Office-holders in Modern Britain, IV: Admiralty Officials 1660-1870* (London, 1975), p. 36. Stephens had been Secretary to the Admiralty since June 1763, and a friend of Dalrymple since at least the 1770s: on 23 January 1778 Dalrymple wrote to D'Après de Manneville that 'My Friend Mr. Stephens Secretary of the Admiralty has given me leave to address any packet ... to him' (Paris, Archives Nationales [AN]: Marine 3JJ 341(16)), a postal system he employed regularly thereafter

with D'Après and Fleurieu.

⁷ Stephens and Marsden had long been members, with Dalrymple, of the Royal Society Club, the select dining club which met weekly on Thursdays throughout the year under the presidency of Sir Joseph Banks, and of which the dinners regularly preceded meetings of the Royal Society. The registers of those dining (Royal Society Archives: Royal Society Club Dinner Books) give insights into the web of informal connections in government and science, particularly in the last quarter of the eighteenth century. For a useful history of the club, see T. E. Allibone, *The Royal Society and its Dining Clubs* (London, 1976). Nepean was Under Secretary in the Home Office from 1782 to 1794, before becoming Under Secretary to the Secretary of State for War for a short time (J. C. Sainty, *Office-holders in Modern Britain, V: Home Office Officials 1782-1870* (London, 1975), pp. 12-13 and 56). The Home Office was the arena of colonial business during Nepean's tenure, and Dalrymple had advised Nepean on the geographical implications of colonial questions (see above, chapter 4, pp. 134-135).

⁸ Dalrymple to Nepean, 27 February 1795 (PRO: ADM.1/3522). This correspondence dates from before Nepean's formal appointment as Secretary to the Admiralty. Dalrymple referred to Dundas as the initiator of the request for information, and it is likely that Nepean carried the papers from the office of the Secretary of State for War to the Admiralty on his appointment.

⁹ Dalrymple to Stephens, 28 May 1795 (PRO: ADM.1/3522), including the sentence 'The Charts & Views are at a stand for want of the Original.'

¹⁰ London, Naval Historical Library [NHL]: Vf.2/21 (see Catalogue B765 950000a Tresco/St. Martin's, B766 950000b St. Mary's, and B767 950000c St. Agnes). This curiosity consists of impressions of three small plates of parts of the Scilly Isles, overlapping in coverage, but cut to join, and mounted with blank paper pieces (watermarked '1801') and borders added by hand, to form a mock-up chart. The borders of the three constituent plates were done to Dalrymple's specifications (see chapter 7, pp. 225-226), their small size suggests that they were done in Dalrymple's East India Company period before he had access to a large-plate press (see chapter 7, p. 221), and the date watermark on the mounting paper contributes to this attribution. The source for the charts appears to be Spence's survey of 1792, later engraved as a single plate at the same scale and published by Hurd in June 1810 (see Catalogue B1111 100627 Scilly Isles). The reason for the survival of the early composite is suggested by its re-use as the base for a pencil sketch of a proposed mole or breakwater in St. Mary's Passage to form an anchorage.

¹¹ Dalrymple to Stephens, 28 May 1795: 'It is very unusual & disagreeable to me that any workman I employ should ask twice for his Money'; Dalrymple to [Stephens], 29 May 1795; Dalrymple to Nepean, 21 July 1795: 'I find Your Admiralty Folks are as tardy in payment as in other things'; Marsden to Wright, 27 July 1795 (PRO: ADM.1/3522).

¹² For example, Dalrymple to Marsden, 16 May 1805 (PRO: ADM.1/3522) concerning the engraving in 1801 of Robert Digby's sketch of islands off Pontevedra (see Catalogue B000 010911d Spain/Cape Corredo), and concluding: 'Are you able to go to the [Royal Society] Club today?'

¹³ Dalrymple to Court of Directors, 10 June 1795 (London, India Office

Records [IOR]: E/1/92, p. 101): 'It is in the contemplation of the Lords Commissioners of the Admiralty to establish an Hydrographical Office for forming and engraving Charts &ca. for the use of the Navy; when I was informed of This, I was also told that They did me the honour to think me a proper Person for the charge of the Office proposed: I replied that altho' I was highly flattered by this preference, I could not undertake It, without your Consent: at the same time I did not doubt of Your concurrence; as there were few parts of The World, in which the Navigation of your Ships might not, at least eventually, be interested, by more precise information than The Publick at present possess: and, consequently, that Their Lordships intention, in my favour, was rather an extension, than contradiction, to the duties of that Employment I now hold in The Company's Service.' The Court consented on 17 June to Dalrymple's request (East India Company, Court Minutes, 17 June 1795 (IOR: B/121, p. 277)).

¹⁴ East India Company, Court Minutes, 13 April 1791 (IOR: B/112, p. 1088). For the circumstances of the award, see chapter 1, p. 24 above. The payments began either at Michaelmas or Christmas 1791, and the last payment was at Midsummer 1808 (East India Company, Pension Warrants 1788-1809 (IOR: L/AG/9/4/1)). Dalrymple's name was not included in the Midsummer 1791 list, the Michaelmas 1791 list is missing, but his name appears under 'Annuities and Pensions' for Christmas 1791 with a quarterly payment of £125 and the authority date of 13 April 1791.

¹⁵ These payments to Dalrymple were neither a salary of office nor a pension, and required a formal resolution of the Court of Directors each quarter before the issue of a warrant for payment. Once the system of quarterly payment of £125 by warrant was established in 1781, these resolutions occur regularly in the Court Minutes until March 1808 (IOR: B/146, p. 1455). These payments are not to be confused with the annuity payments, nor with the advances made to Dalrymple on account for his chart compilation and engraving expenses. These last, as well as being authorised individually by Court resolution usually in sums of £100, £200 or £300, were brought to account separately in the General Ledgers (IOR: L/AG/1/1/24-29 for 1779-1811) by means of the General Commerce Journals (IOR: L/AG/1/6/17-24 for 1779-1814).

¹⁶ Dalrymple to Earl St. Vincent (First Lord of the Admiralty 1801-1804), 9 September [1803?] (PRO: ADM.1/3522): 'When it was proposed that I should be Hydrographer to The Admiralty, I was informed my Salary should be £500 p[er] an[um]: It was wished that I should have been likewise Secretary to The Board of Longitude, the Salary of which, in that case, would have made part of mine, as Hydrographer to the Admiralty; I did not choose to accept of the Secretaryship to the Board of Longitude; ...'. For Dalrymple's balancing of time and energies between the East India Company and the Admiralty, see his rebuttal of his engraver John Cooke's allegations: Dalrymple to Pole, 23 December 1807, pp. 7-8 (PRO: ADM.1/3522). Dalrymple's handling of Cooke is dealt with in chapter 7, pp. 226-228 below.

¹⁷ The last of Dalrymple's annual statements of publications covered the year up to 1 June 1794: *Plans, &c. [1793-1794] 1794* (see Catalogue A205).

¹⁸ Harrison is thought to have emigrated in 1794 (see chapter 9, p. 255 below), though plates he had engraved continued to be published

up till 1796 (see Catalogue B815 960811 River Menam). The last piece of letterpress which Bigg is known to have printed for Dalrymple was an offprint from *Oriental Repertory* early in 1795 (see Catalogue A209 *The Story of Dooshwanta and Sakountala* 1795), though it is likely that the second (duodecimo) edition of the same work, published in May 1795 (see Catalogue A210), was also printed by Bigg. The publication of offprints from *Oriental Repertory* is discussed in chapter 9, pp. 253-254 below.

¹⁹ Catalogue B750 940504 India & Malabar views 7, B758 940729 India & Malabar views 3, B763 941124 India & Malabar views 8, and B824 961102 India & Malabar views 1. Catalogue B761 940908 Arabia & Persia views 1, B764 941210 Persia & Arabia views 2, and B786 950517b Gulf of Persia views 3. Catalogue B782 950510 Cochin China views 3, B962 030403 Cochin China views 1, B963 030404 Cochin China views 2, and B966 030429 Cochin China views 4. Examples of contemporary impressions of plates in these series are rarely found in those collections of Dalrymple's charts, plans and views which extend beyond 1794, though along with later series of plates of views of land all are more widely known from post-Dalrymple Hydrographical Office printings (see chapter 6, p. 207 below). The incomplete series of plates for *Description of the Coast of India* has so far been found only from post-Dalrymple printings.

²⁰ Catalogue B768 950210a Andaman Islands 1, B770 950210c Andaman Islands 3, B771 950210d Andaman Islands 4, B706 920711 Port Meadows, B762 940921 Port Campbell, B772 950210e Great Andaman, B774 950307 Great Andaman Island, and B778 950409 Great Andaman Islands.

²¹ Catalogue B769 950210b Andaman Islands 2.

²² See chapter 6, pp. 208-210 below.

²³ There is no entry 'To Cash to disburse' in Dalrymple's running account for 1795-96 in General Ledger R (IOR: L/AG/1/1/27). Unusually single payments of £500 were recorded in General Ledger S as having been made to him on 30 June 1797 and 30 June 1798 (IOR: L/AG/1/1/28), but only one further advance, of £200 in August 1801 (IOR: L/AG/1/1/29), was made between then and Dalrymple's death. He consistently underspent, or under-accounted, for his outgoings, and was running a 'surplus' of over £2000 in advances after 1796, though with a backlog of unsubmitted accounts. The Company kept the running account open until April 1814, when the balance of advances was written off in the General Commerce Journal as a charge against charts for which Dalrymple had not submitted an account of disbursements (IOR: L/AG/1/6/24 and L/AG/1/1/30).

²⁴ Though kept on an annual basis, the accounts were not presented regularly. Dalrymple apparently submitted in 1798 accounts of his disbursements for the three years 1794-1797, but, though they were recorded as being passed by the Committee of Accounts on 13 June 1798, they were not posted to General Ledger T until the end of the 1804-1805 accounting year (IOR: L/AG/1/1/29). No accounts for years after 1796-1797 appear in the General Ledgers, though Dalrymple applied to the Company early in 1806 for pecuniary assistance with chart production (East India Company, Court Minutes, 21 February 1806 (IOR: B/142, p. 1194)). The resulting discussion in the Court and the Committee of Accounts appears to have been inconclusive, the Court declining to admit a charge for 100 impressions of 130 plates for the

1797-1798 year (Court Minutes, 8 April 1806 (IOR: B/142, p. 1444)). In most years there was a peak in late May in the imprint dates of Dalrymple's charts, views and plans, suggesting that he was bringing into the closing account as many as possible of the nearly complete plates for the year ending 31 May. Plate imprint dates are a crude indicator, but the evidence is suggestive. With an annual average for 1794-1807 of 16 East India Company plates, the quantities with imprint dates in the period 16-31 May in each year were (see Catalogue A): 1794-1795 - 6; 1795-1796 - 11 (including 7 on 31 May); 1796-1797 - 3 (including 2 on 31 May); 1797-1798 - none; 1798-1799 - 2; 1799-1800 - 1; 1800-1801 - none; 1801-1802 - 10 (including 5 on 31 May); 1802-1803 - none; 1803-1804 - 4 (including 2 on 31 May); 1804-1805 - 8 (including 2 on 31 May); 1805-1806 - 13 (including 10 on 31 May); 1806-1807 - none.

25 Annual quantities of plates engraved and published for the East India Company after 1794 rarely exceeded twenty. Notable exceptions were 1804-1805 and 1805-1806, when series of plates were published for *Memoir concerning the Passages at the Southern Extremity of Asia* 1805 and *Voyage from England towards the Red Sea* 1806 (see below, pp. 172-173, and Catalogue A224 and A228).

26 Order in Council, 12 August 1795 (Day, *The Admiralty Hydrographic Service*, pp. 334-335).

27 Admiralty office note of 22 February 1797, endorsement on Dalrymple's account of 'Disbursements in the Hydrographical Office', 7 February 1797 (PRO: ADM.1/3522): 'Mr. Arrowsmith's salary [to be deducted] at the rate of £100 from 7th Sept. 1795 to 10 Nov. 1796.'

28 Day, *The Admiralty Hydrographic Service*, p. 334, n. 1.

29 R. T. Gould, *A History of the Hydrographic Department of the Admiralty*, unpublished typescript, chapter 1, p. 11 (Cambridge: Scott Polar Research Institute 061.1).

30 See note 13 above.

31 Dalrymple to Pole, 10 October 1807, pp. 13-14 (PRO: ADM.1/3522). See note 86 below.

32 For the appointment of Mackenzie and Spence, and their surveys, see Robinson, *Marine Cartography in Britain*, pp. 95-102.

33 Dalrymple was able to identify surveys missing from the Hydrographical Office: 'I beg leave to mention that Several of Lt. Mackenzie's Surveys are not in the Office; but I understand still in his possession.' (Dalrymple to Nepean, 22 March 1800 (PRO: ADM.1/3522)). On Spence he was more severe: 'I find by a letter of Mr. G. Spence dated 16 Sept. 1796 that "he had finished the Survey of the Coast Line from Dungeness to Beachy Head including the old & new Harbours of Rye: & that he should immediately begin to transfer the same from the Field Books into the Chart by Protraction & Delineation." Whether the Chart was ever delivered or not I cannot tell, but it never came to the Hydrographical Office nor do I know whether the Coast from the So. Foreland to Dungeness was done. I should think the readiest way would be to apply to Spence for information. Nor is the Survey of the Owers in the Hydrographical Office.' (Dalrymple to Stephens, 8 June 1801 (PRO: ADM.1/3522)).

34 For Arrowsmith's own business and his earlier connections with

Dalrymple, see chapter 9, p. 249-250 above.

³⁵ Arrowsmith was not paid salary after 10 November 1796 (Admiralty office note of 22 February 1797, endorsement on Dalrymple's account of 'Disbursements in the Hydrographical Office', 7 February 1797 (PRO: ADM.1/3522)). He continued to serve as an agent for *Oriental Repertory*, and it was only in 1808 that an element of sharpness entered the relationship. It was Arrowsmith whom Dalrymple found in the Hydrographical Office ready to take Sir Home Popham's orders, over Dalrymple's head, for pasting charts on cloth for the new Chart Committee (Dalrymple to Pole, 5 March 1808 (PRO: ADM.1/3523)). Dalrymple's memorial of 26 April 1808, after his interview with Pole, criticised Admiralty Board's decision to have surveys sent out of the Hydrographical Office to Arrowsmith for compilation and engraving (Melville Papers (SRO: GD.51/2/399/1)). In May 1808 Dalrymple pointed out 'A Proof of a Chart of part of New Guinea not yet published by me Mr. Arrowsmith acknowledged to have got from my Engraver's Son without my knowledge or permission' (Dalrymple to Pole, 14 May 1808 (PRO: ADM.1/3523)).

³⁶ Dalrymple's account of 'Disbursements in the Hydrographical Office' of 20 February 1797 includes items for reducing and copying of charts by Walker (PRO: ADM.1/3522). Walker was a 'disciple' of Patrick Begbie, and engraved for Dalrymple from 1781 onwards (*General Introduction to a Collection of Plans of Ports* 1783, pp. 34-35).

³⁷ Dalrymple had to write to Nepean on 18 May 1797 to arrange for the payment of Walker's second quarter's allowance (PRO: ADM.1/3522). In Dalrymple's 20 February account of disbursements (PRO: ADM.1/3522) entries for fees to Walker for reducing and copying cease after 7 November 1796.

³⁸ Entries in Dalrymple's account of 'Disbursements in the Hydrographical Office' of 20 February 1797 (PRO: ADM.1/3522).

³⁹ Dalrymple gave a receipt for the charts and journals on 9 November 1795, on the list 'Etat des Calques contenues dans ce Paquet', dating it 'Hydrographical Office, Admiralty' (AN: Marine BB⁴ 993). For the copy of this list and receipt kept in the Hydrographical Office, and bearing Marsden's subsequent receipts of 17 August 1796, see the paper of the same title in PRO: ADM.1/3523. Dalrymple supplied a certificate of Rossel's employment on 25 August 1799 (PRO: ADM.1/3522). For the circumstances of the 'deposit' of D'Entrecasteaux's charts in 1795, see Hélène Richard, *Le Voyage de D'Entrecasteaux à la Recherche de Lapérouse* (Paris, 1796), pp. 210 and 215-216, and Gavin De Beer, *The Sciences were never at War* (London, 1960), p. 50.

⁴⁰ Dalrymple to Nepean, 24 March 1796 (PRO: ADM.1/3522).

⁴¹ Dalrymple to Nepean, 8 March 1799 (PRO: ADM.1/3522).

⁴² Paper by Dalrymple, 12 November 1799 (PRO: ADM.1/3522).

⁴³ Dalrymple to Marsden, 17 June 1798 (PRO: ADM.1/3522). Dalrymple called on his own experience in the *Swallow* in 1776 and 1777 in the Red Sea.

⁴⁴ Report by Dalrymple, 19 June 1798, with lists of charts, plans, views and accounts (PRO: ADM.1/3522).

⁴⁵ Robert Torin: Catalogue B798 960217 Sumatra Views, B801 960312 Se

Beeroo, B826 970107a Lusipara, B827 970107b Strait of Banka 1, B828 970107c Strait of Banka 2, B884 990707 Sapy Strait, and B928 020117 Strait of Banka. George Palmer: Catalogue B873 990217 Tong-hou Cove, B875 990311a Boddam/Strait of Allass, B876 990311b Cajeli Bay, B877 990312 Manevasa, and B900 000421 Anna/Strait of Macassar. William Layman: Catalogue B837 970531b Soosoo, B853 980607a Bussora River, B884 990707 Sapy Strait, and B890 991101 Philipinas. Thomas Dunning Lippiatt: Catalogue B833 970421 River Menam, and B834 970507 Pearl/Gulf of Persia.

⁴⁶ John Macdonald: Catalogue B793 950724 Tapanooley, B841 970824 Fort Marlbro, B844 980109 Rat Island, and B851 980330b Poolo Bay. Robert Bentley: Catalogue B867 990110 Minicoy, B868 990118a Aucutta, B869 990118b Cabrity, and B870 990118c Seuhelipar. John Wedgbrough and Samuel Snook: Catalogue B855 980617 Madura, B856 980627 Manar, B857 980700a Gulf of Manaar, B859 980701 Ceylan, B860 980717 Tutacorin, B863 981130a Laccadives, B865 981227a Gulph of Manar views, and B866 981227b Tutacarine views. James Horsburgh: Catalogue B886 990917 Anna/Sooloo, B891 000307 Anna/New Guinea, B900 000421 Anna/Strait of Macassar, B902 000513 Mindoro Shoals, and B929 020201 Madura.

⁴⁷ Catalogue B807 960530 Guinea Views. Dalrymple took the view from Begbie's sketchbook, lent to him for copying in 1781 (IOR: MSS. Eur. C483).

⁴⁸ See chapter 4, pp. 126 and 121-122 above.

⁴⁹ Catalogue B817 960907 St Helena Bay, B820 961006a Angra Pequena, B821 961006b Walwich Bay, B822 961008a Port Alexander, B823 961008b Spencer's Bay. See also note 55 below.

⁵⁰ Catalogue B854 980607b Mocha Road, B858 980700b Red Sea, B864 981130b Red Sea views 2, B871 990207 Red Sea views 3, B889 991100 Red Sea views 1, and B905 001117 Red Sea Ports. See also Catalogue B838 970601 Red Sea.

⁵¹ Catalogue B810 960531c Resolution views.

⁵² Dalrymple to Pole, 23 December 1807 (PRO: ADM.1/3522).

⁵³ Dalrymple to Nepean, 22 March 1800 (PRO: ADM.1/3522): 'I shall as soon as possible give a List of the Charts & Plans in the Hydrographical Office that are in my Opinion fit to be engraved, distinguishing such as are already reduced to the proper Scale for engraving, as well as such that are on too large a Scale, and therefore requiring to be reduced.'

⁵⁴ Dalrymple memorandum of 26 April 1808, enclosed in letter of 29 April 1808 to Viscount Melville (Edinburgh, Scottish Record Office [SRO]: GD.51/2/399/1).

⁵⁵ Dalrymple to Earl Spencer, 21 February 1797 (Dalrymple Letters (Canberra, National Library of Australia [NLA]: MS.43/17)): 'The accompanying Impressions of Plates were done from Drawings sent to me at the India House in a private letter from Com. Blankett, and the Plates were printed off, before it was suggested that Com. Blankett might have intended them for the Admiralty, altho' directed to me at the India House. This Sugestion prevented me from publishing them 'till his arrival as he was then on his Passage home: it would seem from his

answer to my enquiry, that they were meant for The Admiralty, but as I had printed them before I suspected that they were not meant for my India Collection to which in subject they belong, and in which I have already published Plans of most of the same Places, I wish your Lordship's permission for me to make them part of that Collection done at the East India Company's Expence, especially as they are printed off on The East India Company's Paper and not exactly under a proper form for the Publication from the Hydrographical Office, should any thing be published from thence.' The plans are those listed in note 49 above.

⁵⁶ Dalrymple to Nepean, 22 March 1800 (PRO: ADM.1/3522).

⁵⁷ Dalrymple to Matthew Boulton, 25 April 1774 (Birmingham Reference Library, Archives department [BRL]: Matthew Boulton Papers, Letter D22).

⁵⁸ Dalrymple to Boulton, 31 March 1800 (BRL: Matthew Boulton Papers, Letter D29). Dalrymple had been in friendly contact with Boulton, chiefly in 1797 and 1798, on the subject of metal window frames for his house, and on a piped hot water system for the hot baths he had frequently to take to relieve his complaint of erysipelas (BRL: Matthew Boulton Papers, Letters D25-28).

⁵⁹ Dalrymple to Pole, 23 December 1807 (PRO: ADM.1/3522).

⁶⁰ Catalogue B904 001100 Houat.

⁶¹ Dalrymple recommended Cooke not on personal knowledge, but on the basis of specimens of engraving shown him by Walker (Dalrymple to Pole, 23 December 1807 (PRO: ADM.1/3522)). For Cooke's private business, and his employment solely as a plan engraver, see Cooke to Admiralty Board, 19 April 1804, and Dalrymple to Pole, 23 December 1807 (PRO: ADM.1/3522). Cooke's business address was latterly 11 Pratt Place, Camden Town (I. Maxted, *The London Book Trades 1775-1800* (Folkestone, 1977), p. 51). Palmer, 'the other Plan Engraver', first appeared as engraver on Dalrymple's East India Company charts in 1796 (Catalogue B801 960312 *Se Beeroo*). He undertook both writing engraving and plan engraving, had a private business in Store Street, Tottenham Court Road (Maxted, *The London Book Trades*, p. 168), and died late in 1805 (Cooke to Admiralty Board, [2 January 1806] (PRO: ADM.1/3522)).

⁶² For Harmar as writing engraver, see Dalrymple to Pole, 11 November 1807 (PRO: ADM.1/3522). Harmar first appeared as engraver on Dalrymple's East India Company charts in 1779 (Catalogue B149 790728a *Brazil views*), and maintained a private business, first at 68 Chandos Street, and later at 164 Piccadilly (Maxted, *The London Book Trades*, p. 102). For Higgins and Andrews, see Higgins to Marsden, 2 January 1806, and Dalrymple to Pole, 11 November 1807 (PRO: ADM.1/3522). Andrews' forename is known from his attestation to the handwriting of Dalrymple's will (PRO: PROB.10/3854). The copper-plate printer, father of the replacement engraver 'Richard Bailly Junr.' (Dalrymple to Marsden, 22 June 1807 (PRO: ADM.1/3522)), is probably to be identified with Richard Bailey, copper-plate printer of 30 Berwick Street, Soho (Maxted, *The London Book Trades*, p. 9).

⁶³ Dalrymple to Nepean, 27 May 1803 (PRO: ADM.1/3522): 'I beg again to refer to their Lordships consideration whether it would not be expedient to have such Plates as are copied from Foreign printed Charts and Plans executed out of the Office, as it would greatly

accelerate the formation of an extensive Collection, at the same time that it would be an accommodation to the Engravers, who in that case might employ their whole time in the Public Service: and These Charts & Plans being already known to The World cannot require Secrecy.' The request was endorsed 'Approved'.

⁶⁴ The standard form of wording (see, for example, Catalogue B920 010907a Algoa Bay) was: 'Ship's Store. For which the Captain is to give a receipt & hold himself accountable to be delivered to his Successor when superseded & if the Ship is paid off to be sent up to the Hydrographical Office at the Admiralty.' Against this is to be considered Dalrymple's aside in recommending rejection of Cooke's request of 19 April 1804 for increased pay (PRO: ADM.1/3522): 'When a substantial Number of Plates are engraved for Publication I intended to recommend an Encrease of Pay to the Artists out of the Produce of the Sale.'

⁶⁵ Dalrymple to Nepean, 27 May 1803 (PRO: ADM.1/3522): 'I beg leave to suggest the propriety of delivering to His Majesty's Cruizers, Impressions of such Plates as are engraven in this Office, not only for the information of the Cruizers, but that thereby an opportunity may be afforded of verifying or correcting the Plates, before they are printed off for general use: and for this purpose I have directed a few Impressions to be taken off the accompanying Plates.'

⁶⁶ Catalogue B993 040731 Boulogne, B1074 070000 Great Belt, and B1088 071017 Dublin Bay.

⁶⁷ Day, *The Admiralty Hydrographic Service*, pp. 20-21.

⁶⁸ *Memoir concerning the Hydrographical Map of Part of Ægypt* 1801, p. 1.

⁶⁹ Catalogue B915 010525b Alexandria/Barré, B916 010525c Alexandria/French, and B914 010525a Ægypt (state 1).

⁷⁰ Catalogue B914 010525a Ægypt (state 2).

⁷¹ Catalogue B920 010907a Algoa Bay, B922 010911a Mossel Bay, B923 019011c Plettenberg Bay, B918 010729 West Scheldt, B921 010907b Goerhee, B935 020311 Carrick Road, B923 010911b Ogliaster Bay, B930 020212 Sardinia, B938 020411 Strait of Scio, and B925 010911d Spain/Cape Corredo.

⁷² Dalrymple to Marsden, 16 May 1805 (PRO: ADM.1/3522). The letter is sufficiently explicit to allow the chart described to be identified with Catalogue B925 010911d Spain/Cape Corredo.

⁷³ Originally enclosed in Dalrymple to Nepean, 22 March 1800 (PRO: ADM.1/3522).

⁷⁴ Dalrymple to Nepean, 15 January 1802 (PRO: ADM.1/3522): 'Govr. King in sending the Sketch from which this Plate has been engraved wish[es] it might be communicated to the Whalers & to the Transport Board. I send you some proofs for that purpose.' See Catalogue B927 020000 Bass Strait.

⁷⁵ In the case of the Esquirques and Formigas shoals in the Mediterranean, for example, Dalrymple reported on 10 October 1807 that: 'In my Letter of 28th February 1807, in consequence of Lord Collingwood's very judicious Remarks on the Loss of H. M. Ship athenien, on the Esquirkes, I pointed out the essential importance of

Views of Land, and of Chronometer Observations, and recommended an exact Survey to be made of those Shoals; but I am ignorant whether anything has been done in consequence. I have had a List, made in the Hydrographical Office, of all the Rocks and Shoals in the Mediterranean, according to the different Charts, which List I mean to print for the use of H. M. Navy. The Plan of Formigas, near the Island of Elba, by Capt. Joseph Edmonds, and the Plan of part of the Esquirkes by Capt. Durban have been engraved in the Hydrographical Office; and some Memm. printed of Dangers, received from Lord Keith: but very few Communications are made to the Hydrographical Office.' (PRO: ADM.1/3522). See Catalogue B990 040626 Formigas and B1036 050917 Esquirques for the plans, and Catalogue A225 *Esquirques* 1806.

76 For Nellson's plans, see Catalogue B957 030308 Parenzo, B958 030315 Paran Bay, B959 030318 Citta Nova, B960 030321a Liesina, B961 030321b Polo, B964 030407 Rovignia, B967 030509 Veruda, and B969 030520 Orsera. For Sardinia, see Catalogue B965 030420 Oristana Bay, B974 030607 Sardinia North End, and B981 040220 Magdalen.

77 Catalogue B935 020311 Carrick Road.

78 Catalogue B1022 050501 Falmouth Harbour.

79 Dalrymple to Marsden, 15 June 1805 (PRO: ADM.1/3522). Dalrymple's sketch has not survived with the correspondence, but a note purporting to be a key to the sketch is present.

80 Catalogue B1099 081001 Falmouth Harbour. Hurd carried out the re-survey in 1806, and the chart was in proof before its inclusion in the March 1808 Chart Committee list of charts as 'nearly engraved in the Hydrog: Office' ('A list of Charts', enclosed in Chart Committee letter to Pole, 10 March 1808 (PRO: ADM.1/3522)).

81 See note 33 above.

82 Dalrymple to Nepean, 24 March 1796 (PRO: ADM.1/3522).

83 Dalrymple to Pole, 10 October 1807, p. 3 (PRO: ADM.1/3522).

84 See note 33 above. By October 1807 he was able to say that 'Those parts of The Coast of England which were surveyed by the two McKenzies and Mr. Spence, are engraved, or are engraving in the Hydrographical Office; and TThat recently surveyed by Lieut. Murray.' (Dalrymple to Pole, 10 October 1807, p. 4 (PRO: ADM.1/3522)).

85 Dalrymple to Marsden, 17 January 1804 (PRO: ADM.1/3522). Dalrymple's argument was that the sailing directions which corresponded to Mackenzie's charts should not be altered, and that Spence's observations of changes in channels should be recorded as modifying notes. Marsden's note of action is 'Directions to Mr. Spence accordingly'.

86 Dalrymple to Pole, 10 October 1807, pp. 13-14 (PRO: ADM.1/3522): 'In consequence of omitting to send these Plans & Charts to The Admiralty, It becomes a question whether any use can be made of them in the Hydrographical Office without infringing on Private Property.'

87 Catalogue B1002 081001 St Helen's Road, circulating as an 'Unfinished Proof' with an imprint date of January 1805, and B950 081011b Southampton River, circulating as an 'Unfinished Proof' with an imprint date of 10 November 1802.

88 These four charts have the border and north-arrow specifications associated with Dalrymple's work (see chapter 7, p. 226 below).

89 Catalogue B1096 080911 Isle of Wight/Hampshire, and B1100 081011 Isle of Wight/Gillkicker, in addition to the charts listed in note 87 above.

90 Catalogue B996 041119 Owers, B1032 050721a Isle of Wight South Side, and B1085 070723 England/Winchelsea.

91 Catalogue B1045 060401 England/France. This is thought to be the chart recorded as 'The strait of Dover; Hyd: Office' in the Chart Committee list of 10 March 1808 (PRO: ADM.1/3523).

92 Catalogue B1107 090801a England/Dover, B1102 081101 The Downs, and B1001 050000 Kent/North Coast. The charts for The Downs and the north coast of Kent were recorded in the March 1808 list, but the Dover to Winchelsea chart was omitted.

93 Catalogue B1114 100901b England/Blackwood Point, B1098 080927 England/St Alban's Head, and B1105 090202 England/Abbotsbury.

94 Dalrymple to Marsden, 7 May 1807 (PRO: ADM.1/3522).

95 Catalogue B1113 100901a England/Beachy Head, and B1112 100731 England/New Shoreham. They were drawn to Hurd's specifications, and issued in *Charts of the English Channel* (London, 1813).

96 Catalogue B1108 090801b England/Plymouth, and B1097 080919 Cornwall/Lizard. 'The coast from Plymouth to Sidmouth; Capt. Hurd is surveying it' (Chart Committee list, 10 March 1808 (PRO: ADM.1/3523)).

97 Dalrymple to Nepean, 6 February 1804 (PRO: ADM.1/3522), enclosing a proof of the 'Form of Remark-Book' which had been previously discussed between Dalrymple and Nepean, though no correspondence survives.

98 Dalrymple to Marsden, 23 December 1806 (PRO: ADM.1/3522).

99 Catalogue B1038 051003 Gulph of Palma, and B1039 051106 Sardinia/Asinara.

100 Dalrymple to Marsden, 23 December 1806 (PRO: ADM.1/3522); Dalrymple to Nelson, 31 August 1805 (London, British Library: Add. MS. 34930, f. 319).

101 Catalogue B971 030604a Lampedosa, and B1036 050917 Esquirques.

102 Catalogue B990 040626 Formigas.

103 Catalogue B1092 080411 Montevideo. This plate was in proof in May 1808 (Dalrymple to Beaufort, 4 May 1808 (San Marino, California, Huntington Library [HHL]: Beaufort Collection)): 'I am promised a Proof of your Charts & Views today.'

104 Catalogue B972 030604b Smith's Knowl, B976 031021 Dungyness Roads, and B979 031204 Walcheren.

105 On 10 May Bligh requested payment of an invoice from William Cary for mathematical instruments for the Office (PRO: ADM.1/3522). Dalrymple was back in post by 25 May (PRO: ADM.1/3522). John Cooke, in his complaint against Dalrymple of 18 December 1807 (PRO: ADM.1/3522), wrote of 'Admiral Bligh the short time he had the management of the office'. Dalrymple was absent from the Royal Society

Club for eight consecutive weeks between 8 March and 10 May 1804, a rare event apart from his annual autumn visits to Cheltenham, and a reliable indicator of his ill-health (RS: Royal Society Club, Dinner Book softbound 12 (1803-1804)).

106 Catalogue B1034 050812a Humber, and B1088 071017 Dublin Bay.

107 Bennett does not appear in Maxted, *The London Book Trades 1775-1800* (he is not to be identified with 'W. Bennett' active in 1781), nor in William B. Todd, *A Directory of Printers and Others in Allied Trades: London & Vicinity 1800-1840* (London, 1972). According to Dalrymple, Bennett was recommended by the Bishop of Dromore, and Dalrymple himself had only 'a very indistinct recollection of the circumstances of his appointment' (Dalrymple to Nepean, 10 March 1800 (PRO: ADM.1/3522)).

108 Catalogue A217.

109 Catalogue A212. This was a work of some complexity, with a number of leaves cancelled by authorial revision before publication.

110 Dalrymple to Nepean, 10 March 1800 (PRO: ADM.1/3522): 'I remember that, by desire, I enquired of him what would be the Expence of a Printing Press, Types &ca.'

111 Dalrymple reports sending him 'a note by the Penny Post' in March 1800 (Dalrymple to Nepean, 10 March 1800 (PRO: ADM.1/3522)). His death on 2 July 1801, aged 33, is recorded in J. Nichols, *Illustrations of the Literary History of the Eighteenth Century*, 8 vols. (London, 1817-1858), vol. viii, p. 470: 'Mr. William Bennett, printer to the Admiralty, son of Mr. Thomas Bennett. He was brought up, under his father, in the printing office of Mr. Nichols.'

112 Todd, *A Directory of Printers ... 1800-1840*, p. 161, and Maxted, *The London Book Trades 1775-1800*, p. 191, both record George Roberts as having a press in 1800 at 'Admiralty Office, Westminster'.

113 Catalogue A219.

114 Dalrymple to Pole, 23 December 1807, enclosure 1 (PRO: ADM.1/3522). See Catalogue A221.

115 Catalogue B931 020224 Gorontalo River, and B977 031117 Earl Spencer's Keys.

116 Catalogue B940 020518 Kosseir, B941 020529 Diu, B948 020531d Piram, B949 020531e Zanzibar Road, B985 040511 Java, B986 040519 Cochinchina, B987 040530 Moca, B991 040707 Macassar Road, B1053 060516 Egypt, and B1063 060531h Suez.

117 The first such recorded transmission from 'Mr. Secr. Stephens' was Sir William Hewett's 1756 plan of Gariah (see Catalogue B126 750324a Gariah): 'It is from the Impression of a Copper Plate; this Impression, at the Admiralty, is the only one I can find, and the Plate, which had no Publisher's name, is supposed to be lost' (*A Collection of Plans of Ports in the East Indies 1775*, introduction, p. 15).

118 Dalrymple to Marsden, 13 June 1804 (PRO: ADM.1/3522).

119 Catalogue B982 040227 Sanguey, B995 041101 Batacolo, B998 041130 Fox/Samboangan, B1004 050111b Pollock Bay, B1006 050117 Venloos Bay, B1009 050301a Bomb Vulcan/Timor, B1024 050517a Ceylan/Negapatam, B1049 060507b Merjee River, B1059 060531d Malabar Coast, and B1072

061217 Columbo.

120 Catalogue B1026 050519 African Islands.

121 Catalogue B1043 060307 Acheen Road, and B1047 060501 Point Romania.

122 Catalogue A228, and Catalogue B1056 060531a Adaga Point, B1057 060531b Cossier, B1058 060531c Jeddah, B1060 060531e Mocha Road, B1064 060531i Tor Harbour, B1065 060531j Zanzibar, and B988 040531a Africa/East Coast. The connections between Bissell, Blankett and Troubridge were close: Troubridge not only brought Blankett's collection to Dalrymple (see note 116 above), but was also the agency by which Bissell's journal came to Dalrymple for publication as *Voyage from England to the Red Sea* 1806 with these plans. The plan of Zanzibar Road from Blankett's collection, which Dalrymple had engraved in 1802, was by Bissell. Troubridge enjoyed a special relationship with Dalrymple: in 1805 he was to receive impressions of some of Dalrymple's unpublished charts of the Andamans: Dalrymple to Marsden, 11 July 1805 (PRO: ADM.1/3522).

123 Dalrymple's acknowledgement in the *Memoir* (see Catalogue A230), p. 1, lists the charts (see Catalogue B1040 060107 Passandava, B1042 060211 Majambo Bay, B1048 060507a Bembatooka Bay, B1050 060511a Delagoa Bay, B1051 060511b Narreenda Bay, B1055 060530 Inhamban, B1061 060531f Mozambique Harbour, and B1071 061215 Madagascar).

124 Catalogue A224.

125 Catalogue B994 040912 Po Bintang 9, B1000 041227 Haycock I 15, B1003 050105 Straits of Sinkapoura 1, B1007 050128 Riho 7, B1008 050201 Strait of Malacca 12, B1012 050311 Royal George 6a, B1013 050317 Straits of Sincapore 4, B1014 050319 Strait of Sincapore 3/11/13, B1015 050325 Nonsuch 8, B1016 050401a Byntang 6a, B1017 050401b Straits of Dryon 15/15a, B1018 050410 Point Romania 11b, B1019 050412 Strait of Banka 5, B1020 050419 Strait of Sincapore 16/18, B1021 050421 Tree Island 11a, B1030 050531a Strait of Dryon 17, and B1031 050531b Strait of Malacca 10. For the correlation of these plans with the list of sources in *Memoir of a Chart of the Passages at the Southern Extremity of Asia* 1805, see the notes to Catalogue A224.

126 16 July 1803 to 28 March 1805.

127 Dalrymple to Marsden, 13 June 1804 (PRO: ADM.1/3522).

128 Dalrymple to Marsden, 19 June 1804, and supplementary 'Statement', 21 June 1804 (PRO: ADM.1/3522). Dalrymple calculated the actual retail price as a guideline for the Admiralty, not as a stipulated price. In his assessment of the plans he had expanded the geographical classes from eighteen in 1789 to twenty-three.

129 Dalrymple to Marsden, 23 August 1805 (PRO: ADM.1/3522).

130 The copper-plate printer was to print from Dalrymple's plates 'as expeditiously as the Current Business of the Office will allow' (Dalrymple to Marsden, 23 August 1805 (PRO: ADM.1/3522)).

131 Dalrymple to Marsden, 31 October 1806 (PRO: ADM.1/3522).

132 NHL: Vh.01 ('New Holland and Islands in the Pacific Ocean'); Vh.013 ('Mozambique Channel & Islands East of Madagascar'); Vi.01 ('Red Sea, Gulph of Persia & Coast to Bombay'), 2 copies; Vi.02 ('Coasts of

Chittagong, Malay & Sumatra'), 2 copies; Vi.03 ('Straits of Sunda and Banka, West Coast Borneo & Philippines'), 2 copies; Vi.05 ('Japan, China, Cochin-China, East Coast Malay'), 2 copies; and Vi.09 ('Eastern Passages to China'). Remaining stock was mixed with new charts and new impressions in later editions of these atlases, for which see NHL: Vh.02, Vh.03, Vi.04 and Vb.33.

133 David and Campbell, 'Bibliographical notes', p. 11, fig. a.

134 Dalrymple to Marsden, 4 September 1806, office endorsement of 5 September 1806 (PRO: ADM.1/3522).

135 *Collection of Nautical Memoirs and Journals* 1806, introduction of 24 November 1806, pp. i-ii (see Catalogue A236).

136 East India Company, Miscellaneous Letters Received, 1806: Dalrymple to Court of Directors, 10 September 1806 (IOR: E/1/114, p. 67).

137 Dalrymple's letter was referred by the Court of Directors to the Committee of Correspondence 'to examine and report' (East India Company, Court Minutes, 10 September 1806 (IOR: B/143, pp. 695-696)), but no action was taken.

138 *Collection of Nautical Memoirs and Journals* 1806, introduction, pp. i-ii.

139 *Collection of Nautical Memoirs and Journals* 1806, introduction, p. iv.

140 Catalogue A228 and A230.

141 Catalogue A166, A117, A133, A152 and A165.

142 Catalogue A6, A13 and A113.

143 *Collection of Nautical Memoirs and Journals* 1806, introduction, pp. v-vi.

144 Todd, *A Dictionary of Printers ... 1800-1840*, p. 8. Ballintine and Byworth printed the letterpress title and contents pages for Hurd's atlases (see chapter 6, p. 204 below).

145 NHL: Sa.129; Sa.129a.

146 Without formal contents lists, particularly for the plans, the make-up of these volumes varied slightly.

147 For examples see: 's-Gravenhage, Koninklijke Bibliotheek [KBNL]: 494 B 27; New York Public Library [NYPL]: Maps. There is another example in a private collection.

148 For examples see: Edinburgh University Library [EUL]: P.16.47; KBNL: 494 B 30. There is another example in a private collection.

149 For examples see: EUL: P.16.46 (memoirs only); KBNL: 494 B 26 and 494 B 33. There is another example in a private collection.

150 For examples see: KBNL: 494 B 28; NYPL: Maps. There is another example in a private collection.

151 For examples see KBNL: 494 B 32; NYPL: Maps.

152 For examples see: London, India Office Library: W 4199; Minneapolis, University of Minnesota, James Ford Bell Collection: 1774 f Da (plans only). There is another example in a private collection.

153 For an example see: KBNL: 494 B 29. There are three examples in a private collection.

154 For an example see: NYPL: Maps.

155 For an example see: KBNL: 494 B 31.

156 In three volumes, now divided between King's College Library [KCL] and School of Oriental and African Studies Library [SOAS], London (KCL: Marsden G1/18; SOAS: ED.78.2. 7172; KCL: Marsden G1/20).

157 Now in the Royal Geographical Society Library: 164J.

158 In four volumes, now in the School of Oriental and African Studies Library, London: EX.43. 12134; and EX.43. 14747.

159 Alfred Friendly, *Beaufort of the Admiralty: The Life of Sir Francis Beaufort 1774-1857* (London, 1977), pp. 148-161.

160 Dalrymple to Beaufort, 20 September 1805 (HHL: Beaufort Collection).

161 'I am most especially in want of Observations from Po. Pinang or Prince-Wales Island to Pegu; The Charts of the Islands to the Southward of Mergui are extremely discordant; Forrest, as very careless, is not to be implicitly relied upon, tho' not wanting in ability, and a good Draughtsman. ... The West Coast of Sumatra from Padang to Acheen requires exact Observations of the Longitude; ... ' (Dalrymple to Beaufort, 20 September 1805 (HHL: Beaufort Collection)).

162 In four volumes of letterpress and four volumes of charts, plans and views, now in the Library of Congress, Washington D.C. (G1057.D23-24), for which contents lists were drawn up by Beaufort on the unused parts of letters received by him in the *Woolwich* in November and December 1805. Dalrymple supplemented Beaufort's set with additional charts almost immediately: 'I ... trouble you with a letter for Sir Thomas Troubridge, when you see him, for whom I have desired Bailly to send you a few Plates printed since his departure & send a copy of them to You also in case You should not have got them and also a copy for C. Bissell with my best wishes. ... I have ordered the things to be sent to You at Portsmouth to the care of Sir Charles Saxton Bart. Commissioner.' (Dalrymple to Beaufort, 24 September 1805 (HHL: Beaufort Collection)).

163 In the Library of Congress set, the fourth volume of letterpress has Dalrymple's presentation inscription of 1807, and the charts, plans and views volumes show disturbance of order binding consonant with the subsequent addition of 1805-1807 impressions.

164 Dalrymple to Grenville, 6 October 1806 (NLA: Dalrymple Letters, MS.43/23). Dalrymple had published plans by both Heywood and Edmonds, in the East India Company and Admiralty series respectively.

165 Dalrymple to Marsden, 28 April 1807 (PRO: ADM.1/3522; copy in HHL: Beaufort Collection); Dalrymple to Robert Moorsom, 28 April 1807 (HHL: Beaufort Collection).

166 Catalogue A241 and A247.

167 Catalogue B1086 070804 Colonia del Sacramento. Two other plates were reported to have been engraved: 'Colonia, Maldonado & Barragon on Rio de la Plata, which are the only Plates of those Parts [South America] engraven in the Hydrographical Office.' (Dalrymple to Pole,

31 March 1808 (PRO: ADM.1/3523)).

168 Friendly, *Beaufort of the Admiralty*, pp. 162-168.

169 Catalogue A253.

170 See note 103 above.

171 'A List of Charts sent to Lord Gambier and not returned', 7 December 1807 (PRO: ADM.1/3522).

172 Catalogue B1034 050812a Humber, and B1089 071105 Boston Deepes.

173 Dalrymple to Pole, 14 November 1807 (PRO: ADM.1/3522). The enclosure is not present.

174 'List of English Charts', enclosure in letter from Dalrymple to Pole, 10 October 1807 (PRO: ADM.1/3522). This is an neglected synopsis of the state of private chart publication in London in the early nineteenth century.

175 Dalrymple to Pole, 10 October 1807, p. 1 (PRO: ADM.1/3522).

176 See note 79 above.

177 See note 94 above.

178 Dalrymple to Pole, 24 November 1807 (PRO: ADM.1/3522).

179 Popham and Hurd to [Pole], 4 December 1807 (PRO: ADM.1/3522): 'When we find, Sir, by this correspondence that Mr. Dalrymple, high as he very deservedly stands in the circle of Science, and armed as he must be with the most extensive knowledge in Hydrography, feels delicate in meeting the responsibility which he perceives must necessarily attach to the persons, who select the Charts in question, We hope their Lordships will duly appreciate the difficulties, which are presented to us, and excuse any frequency of reference that may arise from the intricate Duty, committed to our superintendance.'

180 Chart Committee to Pole, 18 December 1807 (PRO: ADM.1/3522).

181 Chart Committee to Pole, 29 February 1808 (PRO: ADM.1/3523). The letter enclosed a 79-page 'First Report', and promised an investigation of the 'vigies' or dangers, which was submitted as a 30-page appendix on 7 March 1808 (PRO: ADM.1/3523).

182 Chart Committee to Pole, 10 March 1808, enclosing 'A List of Charts (selected by the Committee appointed for that purpose) for the Atlantic Ocean; and the Seas branching out of it: with an Estimate of the Expence' (PRO: ADM.1/3522).

183 'A List of Charts', class I (PRO: ADM.1/3522). All except the Bristol Channel sheets, the coast from Plymouth to Sidmouth, and the two westerly sheets of the French coast, were published before the end of 1811 (see Catalogue B), many to Dalrymple's specifications.

184 Hurd's survey was left uncompleted, and the gap in coverage filled by a commercially published chart by J. Foss Dessiou (Andrew C. F. David (comp.), *A Catalogue of Charts, Plans, & Views, printed at the Admiralty Office, for the use of His Majesty's Navy in 1814* (Taunton, 1991), p. v).

185 See note 87 above.

186 Dalrymple to Pole, 15 February 1808 (PRO: ADM.1/3523): 'Four

Plates engraved in the Hydrographic Office cannot be finished for want of proofs, which are paid for out of the £50 p[er] an[num] allowed for contingent disbursements'. Dalrymple to Nepean, 16 January 1802 (PRO: ADM.1/3522), accounts for the 'Copper-Plate Printers bill for Proofs' separately from the fund for contingent expenses. Dalrymple had a smaller fund for disbursements for the Admiralty than for the East India Company (£500 a year), because the salaries of the Admiralty engraver and printer were met centrally.

187 'A List of Charts', class II (see note 183 above). See Catalogue B1001 050000 Kent/North Coast for the proof of chart engraved.

188 Dalrymple to Pole, 5 March 1808 (PRO: ADM.1/3523).

189 Pole to Dalrymple, 1 March 1808 (PRO: ADM.1/3523).

190 Dalrymple to Pole, 5 March 1808 (PRO: ADM.1/3523).

191 Barrow's memorandum, 1 April 1808 (PRO: ADM.1/3523).

192 Barrow's memorandum, and Dalrymple's reaction (see note 193 below), became a document in the Admiralty Board dossier justifying the dismissal of Dalrymple in May. Barrow later added an note to his memorandum, exculpatory of his informality.

193 Dalrymple's endorsement to Barrow's memorandum, 1 April 1808 (PRO: ADM.1/3523).

194 His argument against commercial publishers was not that they should not publish, but that materials deposited in the Hydrographical Office should be published only from that office, and that their accuracy should not be diluted in the map trade by being compiled with other surveys of unknown quality. For this reason he argued against Arrowsmith's application for access to observations from Gambier's expedition to the Baltic for use in his 'Chart of the Sound and Belts' (Arrowsmith to Pole, 19 February 1808; Barrow to Dalrymple, 19 February 1808, directing Dalrymple to give Arrowsmith access to papers; Dalrymple to Pole, 22 February 1808 (PRO: ADM.1/3523)).

195 Chart Committee to Pole, 20 April 1808 (PRO: ADM.1/3523).

196 Dalrymple to Pole, 4, 8 and 27 April 1808 (PRO: ADM.1/3523).

197 Dalrymple had offered to sell the Admiralty impressions from these East India Company plates done from Inverarity's charts, but the Chart Committee had not then considered them (Chart Committee to Pole, 22 April 1808 (PRO: ADM.1/3523), and see note 198 below).

198 Chart Committee to Pole, 2 May 1808 (PRO: ADM.1/3523).

199 Chart Committee to Pole, 22 April 1808 (PRO: ADM.1/3523).

200 See chapter 6, p. 203 below.

201 Dalrymple's memorandum of 26 April 1808, enclosed in his letter to Melville, 29 April 1808 (Melville Papers (SRO: GD.51/2/399/1)).

202 Catalogue A000. Dalrymple to Pole, 26 April 1808 (PRO: ADM.1/3523). Dalrymple's request was for permission to get Bouverie's *Directions* printed out of the Admiralty 'as the Admiralty Printer is so much engaged'; he used Ballintine instead, with the result that *Directions* resembles closely the reprints he had been having done privately in 1806 and 1807.

203 Chart Committee to Pole, 26 May 1808, extract (PRO: ADM.1/3523). For Dalrymple's circular or spherical projection see *Essay on Nautical Surveying*, fourth edition 1806, pp. 57-63 and pl. II.

204 Chart Committee to Pole, 13 May 1808 (PRO: ADM.1/3523).

205 Dalrymple to Columbine, 11 May 1808; Dalrymple to Barrow, 14 May 1808 ('The Charts in question cannot be made use of without a disgraceful and flagrant breach of Public Faith which I cannot suppose their Lordships would knowingly countenance.');

Dalrymple to Pole, 14 May 1808, two letters ('On no account can they be published, till the French publish them.')

(PRO: ADM.1/3523).

206 Pole to Dalrymple, 28 May 1808, copied in letter from Dalrymple to Melville, 30 May 1808 (SRO: GD.51/2/399/2; draft in PRO: ADM.1/3523).

207 'I believe this unexpected Dismission proceeds from a Cause The Admiralty Board are ashamed to urge viz My Remonstrances against producing to view The Copies of the French Charts of M. Entrecasteaux's Voyage which I was directed to get to prevent their accidental loss in the Passage to France': Dalrymple to Melville, 30 May 1808 (SRO: GD.51/2/399/2).

208 Fry, *Alexander Dalrymple*, p. 266, points out that 'Mr. Barrow' was Dalrymple's guest at dinners on 25 May and 9 June 1808 (Royal Society: Royal Society Dinner Book softbound 16). If this was indeed John Barrow, Second Secretary to the Admiralty, it suggests that the events of Dalrymple's dismissal may not have been the total confrontation which conventional accounts have chosen to imply.

209 Catalogue B1084 070502 Prince Wales Island. The later chart 070810 Borneo (Catalogue B1087) is known only from Beaufort's collection, and appears not to have been formally published for the East India Company.

CHAPTER 6

'POSTERIOR USES':•

THE CONTINUING HISTORY OF DALRYMPLE'S CHARTS AFTER HIS DEATH IN 1808

Immediately on Dalrymple's dismissal by the Admiralty Thomas Hurd was appointed Hydrographer to carry into effect the plans of the Chart Committee. The proposal of 22 April 1808 to purchase 100 copies of each chart in the 10 March list of the Atlantic Ocean, Mediterranean and North Sea, held over to the new appointment, received the Board's approval on 10 June.¹ As well as purchasing commercially produced charts, Hurd had to bring Dalrymple's plates on the 10 March list to a state fit for publication. By November 1808 the four sheets of The Solent were ready, with minimal alteration,² and the chart of the south side of the Isle of Wight received a new latitude scale from the Trigonometrical Survey.³ Inconsistencies in Murray's surveys of the Sussex coast continued to cause problems into 1809,⁴ and Hurd had to discard Spence's modification of Mackenzie's chart of the north coast of Kent in favour of a new survey on account of changes in coastal configuration.⁵ He was submitting invoices in March 1809 for the binding of atlases of North Sea and Mediterranean charts,⁶ and in January had reported the issue of 113 boxes of charts to ships in the preceding six months.⁷ A significant proportion of charts in these atlases were Hurd's modifications of Dalrymple's charts: Hurd commissioned Walker outside office hours to modify many of Dalrymple's smaller plates by 'shading' the coastlines, and at the same time ordered the scale bars to be emphasised and additional circles or half-circles of compass rays and north arrows to be engraved within the neatlines.⁸ These plates were then printed two or three to a half-double-elephant sheet for binding with folded double-elephant charts in atlases. Hurd

also began the practice of engraving the Hydrographical Office foul-anchor oval seal within the neatlines of charts: on the composite half-double-elephant sheets of Dalrymple's small plates the oval seal was engraved on only one of the plates to be printed on the page.⁹ The chart series inherited from Dalrymple was sufficiently advanced by 1811 to allow Hurd to publish the two atlases *Charts of the English Channel* and *Charts of the Coasts of France, Spain & Portugal*, with letterpress title and contents pages printed by Ballintine and Byworth.¹⁰ Though there were few plates with Dalrymple's imprint in these atlases, sharp differences between Dalrymple's and Hurd's specifications, particularly in the matter of chart borders, allow the identification of plates which were in preparation and proof under Dalrymple.¹¹ Increasingly Hurd's publications supplanted Dalrymple's charts and private publications bought in for these atlases, but the 1813 form of the *Mediterranean Atlas* and the 1815 issue of the atlas of North Sea and Baltic charts still contained impressions of many Dalrymple plates.¹²

The first issues of the small-format atlases which Hurd prepared for other ocean areas relied heavily on the 100 impressions of East India Company plates which Dalrymple had allowed the Admiralty to print from 1804 onwards.¹³ The Chart Committee had acknowledged Dalrymple's East India Company contribution to the charting of the Atlantic coasts of South America and southern Africa in its report of 10 March 1808, by making use of Dalrymple's 100 copies.¹⁴ The Hydrographical Office foul-anchor black handstamp was increasingly applied to these impressions, and is one means of identifying atlases formed from this stock.¹⁵

Dalrymple did not leave behind any similar workshop in East India House. Impressions of some late plates of the Aracan coast,¹⁶ prepared for the East India Company, survive in the Hydrographical Office, as

did the unfinished plates of his Indian Ocean charts of the 1780s.¹⁷ James Horsburgh was appointed East India Company hydrographer in 1810,¹⁸ to fill the gap left by Dalrymple, on the basis of his own reputation. He had been publishing charts and sailing directions since 1805,¹⁹ and the two volumes of the first edition of his *East India Directory* appeared in 1809 and 1811.²⁰ The East India Company still had sufficient quantities of the 100 contracted impressions of many of Dalrymple's plates for Horsburgh to include, along with his own charts, in the album atlases (generally spine-titled 'East India Pilot') which his Chart Office in East India House prepared for ships' use in the 1820s.²¹ But Horsburgh's systematic production of oceanic and coastal charts for the East Indies navigation eventually superseded Dalrymple's work, and he had no access to Dalrymple's plates for reprinting.

In 1798 Dalrymple had bequeathed to the Admiralty:

... in trust for the Publick, all my Collection of Voyages and Travels, in print or in manuscript, all my Atlases, Charts and Maps, Views of Land and all Nautical Papers in manuscript, leaving to the Publick to make to my Heirs, Executors or Administrators such a consideration for the same as the said Commissioners for executing the Office of Lord High Admiral shall think competent.²²

and to the East India Company:

... all Copper Plates of Charts, or Nautical Plans and Views of Land, finished or unfinished, and the future Copy Right of all my Nautical Publications for such a Sum as The East India Company shall think proper to give, ... This Bequest does not comprehend the Copper Plates belonging to the Oriental Repertory; or to the Translation of South-Sea Voyages, The Collection of Halleys Voyage &c or other of my publications not Nautical.²³

The East India Company had the reversion of the bequest of manuscripts, in case the Admiralty declined, but Dalrymple made no analogous provision in the event of the Company declining the copper plates. Faden examined and valued the collection of atlases and manuscript charts for the Admiralty in August 1809, drawing particular attention to a group of 160 manuscript drawings from Byron's

circumnavigation and to a

Collection of Manuscript Charts [which] relates to the Oriental Navigation and consists of a great number of original charts by Horsburgh, Inverarity, McCluer, &c. &c. &c., some of which have been engraved by the late Mr. Dalrymple; it likewise contains more than one hundred old Dutch Charts drawn on vellum, the whole when selected would furnish a large mass of important information for the use of the Office.²⁴

The Admiralty directed Hurd to have Arrowsmith check Faden's valuation of £1007.5s.0d. before accepting the bequest, and the manuscript charts went to form the nucleus of the Hydrographic Office 'Original Documents' series.²⁵ The atlases, and some of the sheet charts, later formed the basis of the 'Charts' section of the Admiralty Library.²⁶ A consequence of this bequest is that any search for surviving compilation material for Dalrymple's East India Company charts has to begin in the Hydrographic Office archives. The East India Company did not take Dalrymple's copper plates: the letter notifying the bequest was referred by the Court of Directors to the Committee of Correspondence on 23 August 1809,²⁷ no recommendation was returned, and on 30 August the Committee replied in the name of the Court declining the bequest.²⁸ Dalrymple's executors then made the plates an instalment of the King and Lochee sale of Dalrymple's library in 1810.²⁹ The evidence for 130 plates being sold on to the Admiralty by a metal merchant who had bought them as scrap copper is anecdotal but not implausible.³⁰ Further consignments of Dalrymple's copper plates clearly arrived at the Admiralty by other means, for almost four hundred were reprinted there in the first half of the nineteenth century, and 260 are reported to survive in the Hydrographic Office archives.³¹

Hurd's attitude to these Dalrymple plates was ambivalent. They had arrived by no process of selection, yet many were the plates of plans he was continuing to issue from the stock of impressions the Admiralty

had earlier bought from Dalrymple. Natural groupings of plates, such as the pair of plates for Torin's chart of the Strait of Banka,³² were incomplete, but the surviving plates still merited reprinting. Plates of views of land survived and reached the Admiralty in higher proportion,³³ but only four of eight unpublished plates of views to accompany McCluer's charts of western India were available for reprinting.³⁴ Hurd arranged the plates to correspond with his divisions of oceanic areas, and began to have them modified to his specifications before reprinting, just as he had had Walker 'shade' the coasts on the plates of Dalrymple's Sardinia and Australia plans in 1808 and 1809.³⁵ The standard modifications he ordered were shading coastlines and scale-bar units, adding compass rays and north arrow within the neatline, and engraving the Hydrographical Office foul-anchor oval seal, as before, but with Dalrymple's East India Company plates he began also to have the imprints changed. Beginning with the Atlantic Ocean plates, and continuing, with few exceptions, through the surviving plates for Madagascar, the Indian Ocean islands, and the east African coast, he had the publication year date and Dalrymple's name erased from the imprints, to be replaced with a year date between 1809 and 1815 and with his own name as publisher.³⁶ Hurd then printed from these plates to replace the depleted stocks of Dalrymple printings. He suddenly abandoned these imprint alterations in 1815, after the year dates and Dalrymple's name had been erased, but before new dates and his own name had been entered on the plates of plans from the Red Sea and Socotra to Bombay. Dalrymple's name, and an essay (often wrong) at the original year date,³⁷ were then reinstated crudely on this series of plates, while the Assab plate was accidentally left entirely without year and publisher.³⁸ South and east of Bombay, through the entire Eastern Archipelago, the plates were reprinted as modified to Hurd's specifications, but unchanged in their imprints.³⁹ After 1815 Hurd altered the imprint only where he had made a substantial alteration to a

Dalrymple plate.⁴⁰ It seems that Hurd at first added his name to plates to increase 'at a stroke' the number and range of charts he could supply, but soon came to prefer not to take automatic responsibility for the accuracy of Dalrymple's charts. Hurd did not regard his re-issues of Dalrymple's East India Company plates as Hydrographical Office charts: his specified modifications did not include adding 'Hydrographical Office' to the imprints, and his 1814 statement of current charts supplied to the British Museum, though it included Dalrymple's Hydrographical Office charts, omitted all reference to the Company charts.⁴¹ Only after Hurd's death were the Company charts listed undifferentiated from Hydrographic Office charts, in the first Admiralty chart catalogue of 1825.⁴²

Hurd made only limited use of Dalrymple's nautical memoirs. Only two are known revised and reprinted by him, both in 1809: *Collection of Papers concerning the Navigation, Winds and Weather and Description of the Island, called St. Paulo*.⁴³ These were printed for Hurd by William Winchester and Son, Strand,⁴⁴ as was his pamphlet of the same year to explain Dalrymple's 1805 Hydrographical Office plan of Port St. Vincent on New Caledonia.⁴⁵ He appears to have commissioned a new printing of Dalrymple's *General Remarks* from the 1811-1812 partnership of Ballintine and Byworth.⁴⁶ But Dalrymple's nautical memoirs, already ephemeral, were quickly superseded for Indian waters by Horsburgh's *Directory* and elsewhere by the beginning of Hurd's scheme for comprehensive sailing directions on a geographical basis.⁴⁷

The East India Company took over almost thirty of Dalrymple's plates, chiefly of passages through the Eastern Archipelago to China,⁴⁸ but also plates which Dalrymple had left unpublished or of which he had apparently not fulfilled his obligation to deliver 100 impressions. These included the four main sheets of Blair's Andamans survey,⁴⁹ and

five plates of Ceylon harbours from John Wedgbrough's survey of 1796.⁵⁰ There was no obvious policy in the East India Company's choice: the Andaman Islands plates did not join, and the only known example of an impression of the slip plate to complete the series is in the Hydrographic Office archives.⁵¹ The larger-scale port and anchorage plans for the Andamans, also unpublished by Dalrymple, went to the Admiralty, and were rapidly issued by Hurd,⁵² while Horsburgh published Dalrymple's Andamans charts among his own, despite the discontinuity.⁵³ Horsburgh also published four of Wedgbrough's five Ceylon plates,⁵⁴ but the fifth, a plan of the passage between Mannar and Ceylon, is known only as a proof in the India Office Records from the damaged plate.⁵⁵ A manuscript fair draft of this plan, to the scale and size of the engraving though differently oriented, lies among the Hydrographical Office materials inherited by the Admiralty Library.⁵⁶ Horsburgh and his successor Walker⁵⁷ printed from the plates in East India Company hands occasionally until the mid-1840s, for example providing the British Museum with impressions in a general presentation of current charts in 1855.⁵⁸ The copper plates went to the Admiralty, with the rest of the East India Company's current hydrographical materials in 1861, on the transfer of responsibility for charting and chart publication in Indian waters.⁵⁹

By a natural process of supersession Dalrymple's charts began to be withdrawn as new surveys were published, and fell from the published catalogues.⁶⁰ In 1838, all charts then currently available from the Hydrographical Office were allocated numbers in a single numerical sequence passing through the catalogue.⁶¹ Dalrymple's East India Company charts received numbers along with those of his Hydrographical Office charts still current and with charts published by Hurd and subsequently under Parry and Beaufort.⁶² On revision and correction these chart numbers were added to the plates before

reprinting. The plates transferred from the India Office in 1861 were candidates for the same treatment, though only the Andaman Islands plates were treated as current and allocated the vacated numbers 159a-159d.⁶³

By now Dalrymple's charts and publications had become thoroughly assimilated into the work of the Hydrographical Office, and the revisions to most of his surviving plates effectively disguised their origin. The last surviving Dalrymple plate is recorded as going out of production in 1959,⁶⁴ more than a century and a half after Dalrymple died.

NOTES TO CHAPTER 6: 'POSTERIOR USES'

* 'Those who understand the language and have seen them [i.e. the French charts of D'Après de Manneville], must have a despicable opinion, of our India Pilot, with which Messrs. Mount and Page have long imposed on, and picked the pockets of, our Countrymen, and which are only fit for the Grocers and Chandlers Shops, or posterior uses.' (*The French, and English, Marine Regulations Compared* [1793], p. 3). This is the only instance of intentional misquotation in this study: the secondary sense, meaning the posthumous use of Dalrymple's charts, is intended.

¹ Chart Committee to Pole, 22 April 1808, endorsed by Pole with directions 10 June [1808] (London, Public Record Office [PRO]: ADM.1/3523).

² See Catalogue B1096 080911 Isle of Wight/Hampshire, B1002 050100 St Helen's Road, B1100 081011 Isle of Wight/Gillkicker, and B950 021011 Southampton River. The second and fourth of these are known to have been circulating in January 1805 and October 1802 respectively as 'Unfinished Proofs' (see chapter 5, p. 169 above). Hurd appears to have added only a line of bearing to one and a leading line to the other before formal publication in 1808.

³ See Catalogue B1032 050721a Isle of Wight South Side. The chart which Dalrymple had published from Mackenzie's survey was a finished chart, not designated an unfinished proof, but Hurd's addition of the latitude scale was sufficient for him to treat the chart as an 1808 re-issue with his own name in the imprint. Hurd shortly afterwards requested application to the Board of Ordnance for official access to the coastal parts of Colonel William Mudge's survey of the south of England, for revising the land base for Mackenzie's observations (Hurd to Pole, 1 November 1808 (PRO: ADM.1/3523)). For the progress of Mudge's survey, and the availability of coastal data for the Isle of Wight and adjacent coasts, see *The Old Series Ordnance Survey Maps of England and Wales*, 8 vols. (Lympne Castle, 1974-1992), especially vol. iii, introduction pp. xv-xvii.

⁴ Hurd complained to Pole on 2 November 1808 that for eighteen months Murray had sent in no work or report on his work between Winchelsea and Beachy Head, and repeated his complaint on 23 June 1809 (PRO: ADM.1/3523). Murray sent in copies of his surveys early in 1809 and on 30 June, but Hurd found that they did not agree with each other, and did not connect with Mackenzie's and Spence's adjoining surveys (Hurd to Pole, 4 July 1809 (PRO: ADM.1/3523)). After a process of reconciliation Hurd published Murray's surveys in 1810 (see Catalogue B1112 100731 England/New Shoreham and B1113 100901a England/Beachy Head), but understandably neither chart owed more than concept, scale and area allocation to Dalrymple's scheme.

⁵ See Catalogue B1001 050000 Kent/North Coast. Mackenzie's survey was engraved before Isaac Palmer died late in 1805, but not published. Early issues of Hurd's *Charts of the English Channel* (see note 10 below) omit the called-for charts of North Kent and the Swin, but one copy of Hurd's atlas is known to have been augmented later with a proof (without imprint) of the north Kent chart (London, Naval Historical Library [NHL]: Vy.9/5, previously Hydrographical Office: Original Document 164 on DE1) on paper watermarked '1810'. Hurd

replaced both charts on 7 March 1812 with the revised smaller-scale chart 'Entrances into the River Thames'.

⁶ Hurd to Pole, 14 March 1809, listing bills presented, including 'Mr. Fraser for binding Atlases of the No. Sea & Mediterranean £32.4s.6d.' (PRO: ADM.1/3523).

⁷ Hurd to Pole, 17 January 1809 (PRO: ADM.1/3523).

⁸ Walker's account, 26 May 1809 (PRO: ADM.1/3523), lists the charts for which he had been employed in 'Shading Coast' in 1808 and 1809. These were: B952 030127 Bass's Straits, B954 030211 Kent's Group, B956 030301 Western Port, B1037 050920 Port St Vincent, B974 030607 Sardinia North End, B923 010911b Oglaster Bay, B1039 051106 Sardinia/Asinara, B965 030420 Oristana Bay, B973 030604c Tunis Bay, B990 040626 Formigas, B1034 050812a Humber, B999 041211 Bridlington Bay, and B997 041121 Aberlady Bay. Walker's invoice does not specify charging for alterations to scale bars and compass rays, but, of the charts which acquired these mechanical modifications, no examples of the 'shaded coast' state are known with the 'shaded coast' modification alone, and it reasonable to assume that the modifications were carried out at the same time, if not by the same engraver.

⁹ See, for example, the half-double-elephant composite pages in Hurd's atlas of North Sea and Baltic charts of 1815 (NHL: Vk.4/9-10) and in his *Mediterranean Atlas* of 1813 (NHL: Vk.5/15-16, Vk.5/20 and Vk.5/23-27). When charts were reprinted in the 1820s for sale singly, the plates of Dalrymple's smaller plans which were still current, and which had not acquired the large Hydrographical Office oval early under Hurd, were engraved with the smaller form of foul-anchor oval seal then being used for new charts. The set of charts presented in 1830 by the Admiralty to the Bibliothèque Nationale in Paris (BN: Ge.CC.1079-1082 and Ge.FF.4699-4701, particularly Ge.FF.4700(7)-(9)) demonstrates the two types of oval. The 1820s style of oval seal is illustrated as figure 'b' on page 11 of Andrew David and Tony Campbell, 'Bibliographical Notes on Nineteenth Century British Admiralty Charts', *The Map Collector*, 26 (March 1984), pp. 9-14. David and Campbell omit consideration of the early Hurd form of the oval seal, and their preliminary study now needs deepening, particularly in respect of Hurd's early engraving and publishing practice.

¹⁰ Thomas Hurd, *Charts of the English Channel: Compiled, Selected, & Engraved, in the Hydrographical Office, from Original Surveys and other Authorities, for the Use of the Royal Navy* (London, 1811), and *Charts of the Coasts of France, Spain & Portugal, from Brest to Gibraltar, forming Volume II of the Channel Atlas: Compiled ...* (London, 1811). These two volumes have become known colloquially as 'Hurd's Channel Atlas'. Hurd omitted from his first volume the intended charts of the Thames Estuary, north coast of Kent, Sidmouth-Plymouth coast, Bristol Channel north of Hartland Point, and French coast west of Cape Barfleur. The intended coastal charts are uniformly signified as omitted from the second volume.

¹¹ Andrew C. F. David, 'Alexander Dalrymple and the Emergence of the Admiralty Chart', in *Five Hundred Years of Nautical Science 1400-1900*, ed. Derek Howse (Greenwich, 1981), pp. 153-164, illustrates (p. 161) the major difference in chart border types which has been used as a crude yardstick to separate 'Dalrymple-origin' charts from 'Hurd-origin' charts. Hybrid chart border types exist (see chapter 7, p. 226 below,

for a discussion of chart specifications), and it is important not to exclude arbitrarily from the Dalrymple oeuvre charts such as Murray's of Sussex (see note 4 above) in Dalrymple's south coast of England series which were eventually engraved entirely to Hurd's specifications.

¹² Seven Dalrymple imprints in the 1814 atlas of North Sea and Baltic charts, and nineteen in *The Mediterranean Atlas* of 1813. Though Hurd began early to issue charts in atlases (see the binding invoice of March 1809 in note 6 above), he appears not to have provided formal title-pages other than for the two volumes of the *Channel Atlas*. *The Mediterranean Atlas* is known from an example with a pasted cover label of 'Contents of the Mediterranean Atlas' and a latest chart date of December 1813 (NHL: Vk.5), and its companion, with charts up to February 1815, has only a cover label with two contents lists headed 'North Sea Charts' and 'Baltic Charts' (NHL: Vk.4).

¹³ These are known for: Mozambique Channel and islands to the east of Madagascar (NHL: Vh.013); Red Sea, Gulf of Persia and coast to Bombay (NHL: V1.01 (2 copies)); Coasts of Chittagong, Malay and Sumatra (NHL: V1.02, V1.02a); Straits of Sunda and Banka, west coast of Borneo, Philippines etc. (NHL: V1.03 (2 copies)); Japan, China, Cochin China and East Coast Malay (NHL: V1.05, V1.05a); Eastern Passages to China (NHL: V1.09); New Holland and islands in the Pacific Ocean (NHL: Vh.01).

¹⁴ Notes to Class IX of 'A List of Charts ... for the Atlantic Ocean' enclosed in letter from Chart Committee to Pole, 10 March 1808 (PRO: ADM.1/3523). The Chart Committee was not undiscerning in its assessment of Dalrymple's charts and plans: of Dalrymple's 1769 chart of the southern Atlantic Ocean (Catalogue B11 690400 South America) they reported: 'There is no necessity to purchase any more of this chart, but after this hundred are expended, purchase Faden's one sheet chart of the South Atlantic published in 1808.'

¹⁵ David and Campbell, 'Bibliographical Notes', p. 11, figure 'a', illustrates this handstamp, which was generally used by the Hydrographical Office, before the regular engraving of the oval seal, as a stamp of approval for charts and sailing directions for issue to the fleet. Some early atlases lack the handstamp entirely (e.g. NHL: Vh.01, Vh.013). Stocks of these atlases were updated with new plans at least until the 1840s, and the presence of black handstamps is a reliable indicator of the use of residual stocks of Dalrymple's 1804-1806 printings.

¹⁶ Taunton, Hydrographical Office [HO]: Original Documents y16 on Bb2, y16 on Bb4 and y22 on Bb4 (see Catalogue B1075 070101a Chittagong and B1081 070402 Chittagong). These two charts may have been intended for the 1807 re-issue of *Collection of Nautical Papers concerning the Bay of Bengal* (see Catalogue A243).

¹⁷ See Catalogue B354 840000 Madagascar and B442 850000 Cape Mons. Proofs were taken before the plates were destroyed (HO: A13 in folio A, and A20 in folio A).

¹⁸ East India Company, Court Minutes, 31 October 1810 (London, India Office Records [IOR]: B/152, p. 985). Horsburgh was appointed in Dalrymple's place to receive an annual salary of £200 'during the Court's pleasure'. His work was 'to examine the Journals of the Company's Ships, and in preparing accurate Charts'.

19 [James Horsburgh,] *Memoirs: Comprising the Navigation to and from China, by the China Sea, and through the various Straits and Channels in the Indian Archipelago; also, the Navigation of Bombay Harbour* (London, 1805).

20 James Horsburgh, *Directions for Sailing to and from the East Indies*, 2 vols. (London, 1809-11). Later editions bore the title *East India Directory*.

21 Two of these album atlases are known to survive, assembled in the 1820s for the Indiamen *Berwickshire* (London, National Maritime Museum: Department of Navigation atlas BER 001) and *Castle Huntly* (IOR: X/3628). Each contains a set of charts current in the 1820s, chiefly Horsburgh's charts but with a considerable admixture of Dalrymple's plans, and each was updated with new charts at various times until the mid-1830s. Little is so far known of the East India Company Chart Office at this period, beyond its inclusion from 1816 to 1831 in the list of Home offices in the *East India Register*.

22 Will of Alexander Dalrymple, 24 December 1798, with cancellations and codicils of 29 October 1805, para. 28 (PRO: PROB.10/3854).

23 Will of Alexander Dalrymple, para. 29 (PRO: PROB.10/3854).

24 Faden to Hurd, 12 August 1809, enclosure in letter from Hurd to Pole, 14 August 1809 (PRO: ADM.1/3523).

25 The earliest surviving register of Original Documents ('Register A'), begun c.1824, is preserved in the Hydrographic Office Archives. The typescript digest prepared by D.A. Langmead in 1974 omits all reference to entries deleted in the original manuscript register, and is consequently of less use for investigating the early history of the collection.

26 See *Catalogue of the Naval Library, Ministry of Defence, London*, 5 vols. (Boston, 1967), section V 'Charts'.

27 East India Company, Court Minutes, 23 August 1809 (IOR: B/143, p. 685).

28 East India Company, Minutes of Committee of Correspondence, 30 August 1809 (IOR: D/3). The Company was approached by, and replied to, James Seton, acting for the executors.

29 *A Catalogue of the Extensive and Valuable Library of Alexander Dalrymple Esq. F.R.S.*, 4 parts (London, 1809-1810). Neither the oriental nor the nautical materials were offered in this sale, the former being bequeathed to William Marsden and the latter accepted by the Admiralty (see note 22 above). The residue, Dalrymple's general library, formed the first three parts of the sale, with the copper plates and bundles of impressions the chief element in the fourth part. Most sets of catalogues of this sale in public and research collections are incomplete: the only five-part set located during the course of this study is in Canterbury Cathedral Library.

30 Archibald Day, *The Admiralty Hydrographic Service 1795-1919* (London, 1967), p. 32, gives R.T. Gould's draft history of the Hydrographic Office as his source. A typescript of Gould's draft of two chapters, giving an account of the Office to 1829, is in the first file of 'Parry Papers', a collection formed by J.F. Parry, Hydrographer 1914-1919 (HO: Archives, Miscellaneous Letters and Papers, file 4).

Day (p. 31) traced Gould's source for the acquisition of Dalrymple's plates to G.H. R[ichards], *A Memoir of the Hydrographical Department of the Admiralty 1868* [London, 1868], p. 5: 'About 1809, a large addition was made to the office stock of copper plates; all Dalrymple's private Hydrographical works and copperplates had been by his will offered for sale first to the India Company, and then to the Admiralty; but being declined by both Boards on account of the price, were sold by public auction, the latter as old copper; they were subsequently, through the exertions of Mr. Walker, obtained for the Admiralty—the plates amounting to one hundred and thirty.' Day pointed out that one of Richards' sources was 'the fragmentary notes of one connected with the Department from its earliest days, and until lately living, supplemented by his own knowledge and recollections' (Richards, *Memoir*, p. i), and tentatively identified this person as Michael Walker, a son of John Walker and a draughtsman and engraver who joined the Office shortly after Dalrymple's dismissal. David ('Alexander Dalrymple', p. 162) attributes the story directly to Michael Walker.

³¹ Where an East India Company plate is known to have been reprinted by the Hydrographical Office, the fact is noted after the entry in Catalogue A below. A list of 270 Dalrymple plates surviving in the Hydrographic Office was communicated privately by the Hydrographic Office Curator in July 1986: ten of these plates are identified as having been in East India Company hands until transfer in 1861 (see note 59 below).

³² See Catalogue B387 840620 Fort Dauphin 1, B382 840527b Port Dauphin 2-3, B383 840530 Fort Dauphin 4-5, and B389 Port Dauphin 6-7. Only the plate for the first of this series of comparative representations came to the Admiralty, to be reprinted as Admiralty Chart 690.

³³ The main evidence for the existence of many of Dalrymple's unpublished plates of views of land engraved before 1783 is the presence in collections of Admiralty charts of impressions taken for publication by the Hydrographical Office from the plates after 1810. This is not, in itself, evidence of near-completeness of transmission, but it is significant when considered together with the fact that 100% of Dalrymple's *published* East India Company plates of views of land were received by the Hydrographical Office after his death and all were reprinted in the Admiralty Chart series (see notes to entries in Catalogue A).

³⁴ See Catalogue B824 961102 India & Malabar views 1, B758 940729 India & Malabar views 3, B750 940504 India & Malabar views 7, and B763 941124 India & Malabar views 8.

³⁵ See p. 203, n. 8 above.

³⁶ See, for example, Catalogue B41 740205d Flesh Bay, which was modified by Hurd, re-dated 5 February 1811, and later allocated chart number 638. More than sixty plates were treated in this way, though not all remained current long enough to receive chart numbers (see notes to entries in Catalogue A).

³⁷ See, for example, Catalogue B53 740205p Socotra, which was modified by Hurd, and had '1774' and Dalrymple's name erased and re-entered in the imprint. Plans between Socotra and Bombay which are known to have received this treatment are Catalogue B53 740205p Socotra, B375

840504 Messaua, B362 840204 Suaquem (date re-engraved as 1781), B278 820224 Suez, B159 791025 Tor, B145 790420b Yambo Harbour, B349 831016 Mursa Sememah, B347 831007b Mursah Gedan, B372 840414c Moha, B274 820207 Aden (1784 date of second imprint re-engraved as 1782), B948 020531d Piram, B917 010701 Arabia/Aden, B357 840107a Maculla Bay, B117 750115b Kisseen Bay, B381 840527a Morebat Bay, B486 860529 Muscat Cove, B199 801210 Persia/Churbar, B108 741215a Crotchey Bay, B955 030219 Cutch & Guzarat, B611 891202 Jaffrabatt, B797 960123 Rajapora (date re-engraved as 1790), B414 841007b Nunsaree River, B417 841026 Gundivee River (date re-engraved as 1783), B625 900228 Demaon (date re-engraved as 1798), B411 840924 Danno River (date re-engraved as 1787), B443 850111 Manhora (date re-engraved as 1805), B201 801227 Vassava, and B204 810107 Mayham (date re-engraved as 1782). The chief source of examples is the Hurd small-format atlas of c.1822 for the Red Sea and coast to Bombay (NHL: VI.014).

³⁸ See Catalogue B347 831007a Asab.

³⁹ These are identifiable only by the presence of the standard modifications, including the foul-anchor oval.

⁴⁰ See, for example, Catalogue B65 740225g Engano Island (new plan engraved and re-dated 29 May 1822), B92 740725a Bushier (re-oriented and re-dated 8 December 1820), and B200 801221 St Thomas (inverted and re-dated 15 April 1817). This system of revision became established and continued after Hurd's death: see, for example, Catalogue B99 740805 St Jacinto (new plan engraved and re-dated 1 November 1826), and Catalogue B892 000403a Cochin China (plate cropped, plan revised and re-dated 20 May 1840).

⁴¹ Manuscript 'List of Admiralty Charts', 12 November 1814 (London, British Library: Maps C.21.c.15.), published facsimile in Andrew C.F. David (comp.), *A Catalogue of Charts, Plans, & Views, printed at the Admiralty Office, for the use of His Majesty's Navy in 1814* (Taunton, 1991). In his introduction (pp. iii-iv) David considers that Hurd left his list 'incomplete' by not including impressions from Dalrymple's East India Company plates acquired by the Admiralty in 1810. Consequently he has arbitrarily added to Hurd's list all the East India Company plans of which Hurd had completed the alteration of the imprint, and of which the imprint date, as altered, reads earlier than November 1814. He has excluded the plans on which Hurd's altered date reads later than November 1814, all plans on which Hurd began to alter the imprint and then changed it back again, and all plans which Hurd modified without changing the imprint. The result is unnecessarily to camouflage, on obscure subjective grounds, the basic distinction which Hurd continued to make, in his forms of chart imprint, between charts issued with the authority of the Hydrographical Office and plans from East India Company plates bought in and reprinted without claim of authority for the convenience of potential users.

⁴² *A Catalogue of Charts, Plans, & Views, printed at the Admiralty Office, for the use of His Majesty's Navy* (London, 1825). If success were to attend the current search for a copy of the catalogue Hurd is supposed to have produced, if not printed, in June 1821 in response to orders given him on 20 November 1820 (David and Campbell, 'Bibliographical Notes', p. 14), this statement would require re-assessment.

⁴³ The only known examples are at NHL: Sa.129 and Sa.129a (see

Catalogue A255 and A256).

⁴⁴ William Winchester is recorded printing as 'Winchester & Son' from 1803 to 1819, in Strand or, in 1804, at 20 Villiers Street (William B. Todd, *A Directory of Printers and Others in Allied Trades: London & Vicinity 1800-1840* (London, 1972), p. 215). It is not clear whether Winchester replaced Ballintine & Byworth as Admiralty printers after 1812, or indeed whether either firm was considered the official printer.

⁴⁵ *Remarks by Captain Kent, R.N. on the Harbour of Port St. Vincent, situated on the S W side of New Caledonia* 1809 (NHL: Sa.129, Sa.129a; see Catalogue A257).

⁴⁶ NHL: Sa.129 (see Catalogue A227). Todd, *A Directory of Printers*, p. 8, records no evidence for the existence of the Ballintine and Byworth partnership after 1812.

⁴⁷ For example, Marino Miguel Franzini, *Description of the Coasts of Portugal and Nautical Instructions*, trans. W. F. W. Owen (London, 1814), with Hurd as Hydrographer the official publisher.

⁴⁸ Impressions from these plates formed part of the East India Company presentation of charts to the British Museum in 1855 (London, British Library [BL]: Maps 147.e.17.(88-92, 97-107, 109-111.)): see Catalogue B556 880322 Princess Augusta, B1078 070122 Gilolo, B554 880315 Warwick, B574 880924 Halmahera, B725 930418 Boero, B449 850127 Acheen Road, B585 890124 Carnatic, B546 880201 Banka, B888 991030 Straits of Allass, B884 990707 Sapy Strait, B340 830701 Sapy Bay, B697 920412 Mangerye, B726 930503 Mangerye, B709 920907 Copang Bay, B913 010511 Timor, B148 790727 Geby, B910 010402 Kema Road, B530 870510 Celebes, and B875 990311a Boddam/Strait Allass.

⁴⁹ BL: Maps 147.e.17.(93, 95-96, 112.): see Catalogue B768 950210a Andaman Islands 1, B770 950210c Andaman Islands 3, B771 950210d Andaman Islands 4, and B772 950210e Great Andaman.

⁵⁰ See Catalogue B855 980617 Madura, B856 980627 Manar, B857 980700a Gulf of Manaar, B859 980701 Ceylan, and B860 980717 Tutacorin: not included in the 1855 presentation to the British Museum.

⁵¹ HO: Original Document 573 on Ba4 (see Catalogue B769 950210b Andaman Islands 2).

⁵² See Catalogue B706 920711 Port Meadows, B762 940921 Port Campbell, B774 950307 Great Andaman Island, and B778 950409 Great Andaman Islands.

⁵³ Catalogue B768 950210a Andaman Islands 1, B770 950210c Andaman Islands 3, B771 950210d Andaman Islands 4, and B772 950210e Great Andaman. Examples of Horsburgh's impressions are in IOR: X/3630/61a-61d and X/3631/61a-61d (bound sets of Horsburgh's charts), and X/3628/46-49 (Horsburgh's Chart Office atlas of charts for ship *Castle Huntly*).

⁵⁴ Catalogue B855 980617 Madura, B857 980700a Gulf of Manaar, B859 980701 Ceylan, and B860 980717 Tutacorin. Examples of Horsburgh's impressions are in IOR: X/3630/40-43 and X/3631/40-43 (bound sets of Horsburgh's charts).

⁵⁵ Catalogue B858 980627 Manar. The only known impression is IOR: X/3733.

⁵⁶ NHL: Vf.8/5.

⁵⁷ John Walker, son of Dalrymple's assistant of the same name, had taken most of the East India Company and Admiralty engraving work into the firm of J. & C. Walker by the 1820s. Walker succeeded Horsburgh as Geographer to the East India Company in 1836, and, besides his Admiralty work, engraved and printed *Indian Atlas* sheets and East India Company charts, the former until shortly before his retirement in 1873 (C. R. Markham, *Memoir on the Indian Surveys*, second edition (London, 1878)).

⁵⁸ BL: Maps 147.e.17 (Dalrymple's plates; see note 48 above); Maps 147.e.18 (Horsburgh's charts); and Maps 147.e.19 (Walker's charts).

⁵⁹ Day, *The Admiralty Hydrographic Service*, pp. 68-69.

⁶⁰ See the notes to entries in Catalogue A for dates of withdrawal of Dalrymple's charts.

⁶¹ L. N. Pascoe, 'List of Admiralty Charts published each year from 1795 to 1828', rough manuscript notes, 1978 (Taunton, Hydrographic Office Archives).

⁶² For the first published allocation of numbers, see *Catalogue of Charts, Plans, Views, and Sailing Directions, &c. published by order of the Lords Commissioners of the Admiralty* (London, 1839). See the notes to entries in Catalogue A for chart numbers where allocated. Many Dalrymple charts were withdrawn without justifying another printing after 1838 to include the allocated numbers.

⁶³ The first Admiralty Chart catalogue to include the charts transferred from the East India Company was that for 1863.

⁶⁴ Day, *The Admiralty Hydrographic Service*, p. 22. The chart was 920421 Nancowry Harbour (see Catalogue B698).

CHAPTER 7

'MAKING CHARTS AND DRINKING TEA':*

DALRYMPLE'S PRODUCTION METHODS FOR CHARTS AND MEMOIRS

The day before his dismissal by the Admiralty in May 1808, Dalrymple recorded with evident pride the length of his service:

It is little less than 50 years since I first made a Chart; I have been a Publisher 40 years; and have been 29 years employed expressly as Hydrographer by the East India Company and almost 13 as Hydrographer to the Admiralty.¹

The first specifications for style and presentation which he set for his draftsmen, engravers and printers had undergone few changes and developments over the forty years during which he had been publishing charts and memoirs. Plans of widely differing publication dates exhibit more similarities than differences,² and the new nautical memoirs and notices of 1806-1808 were similar in style to his 1771 *A Collection of Charts and Memoirs*.³

Dalrymple's 1769 specification for a series of charts and plans was governed by the resources then available to commercial engravers and printers in London. He announced a general size of 'twenty-four inches by eighteen, within the margin':⁴ with a half-inch added for borders this corresponds with a plate size of $25\frac{1}{2} \times 19\frac{1}{2}$ inches, suitable for printing on sheets of royal paper. Within this regimen of plate size, paper size and press size, Dalrymple began to use full plates for charts, cut half-plates ($25\frac{1}{2} \times 9\frac{1}{2}$ inches) for views of land, and cut quarter-plates ($9\frac{1}{2} \times 12\frac{1}{2}$ inches) for small charts and plans of ports. This convenient system he retained for his 1774-75 plans, and later for his East India Company publications, with variations.⁵ Large plans or small charts were accommodated on half-plates cut either way: $9\frac{1}{2} \times 25\frac{1}{2}$ inches or $19\frac{1}{2} \times 12\frac{1}{2}$ inches. Either of these shapes bound up easily with the

quarter-plate plans, the size of which matched the untrimmed quarto letterpress with which they were published in 1774 and 1775, and with which they were commonly bound after 1779.⁶

The size of the press which Dalrymple had Boulton install in 1774,⁷ presumably in Pigot's house in Soho Square, is not known. If it was the same press used for Dalrymple's plates after 1779, it must have been capable of printing at least the 25½ x 19½ inch chart plates, and perhaps also the 28 x 23 inch large chart plates which Dalrymple used from the later 1780s.⁸ Little is known about Dalrymple's arrangements for printing from his East India Company plates, other than that he was held personally accountable for the paper stocks he bought with the annual £500 advances.⁹ For the new press to be supplied to the Admiralty in 1800, Dalrymple specified to Boulton that it should be capable of taking a 32-inch plate.¹⁰ This was to enable the production of charts from 39 x 25½ inch plates on double-elephant (40 x 27 inch) paper,¹¹ though the plates were awkward to handle, particularly for the writing engraving.¹²

The earliest impressions of Dalrymple's charts were on China paper, though a soft French paper or a Whatman laid paper was used for all except presentation copies.¹³ A variety of papers is found in the 1774-75 plans, chiefly thin laid papers, though the stone-engraved charts re-issued in 1775, and the larger plans and views, are found on a very thick laid French paper.¹⁴ French paper of a sufficient size was available for the first printings of the Madras Lands map in 1779,¹⁵ but later printings required patchwork sandwiches of Whatman laid paper to create 'sheets' large enough for the composite of plates.¹⁶ Early issues of the 1779-1783 charts, plans and views were printed on thin laid paper with a variety of watermarks, the views on a hard thin paper (to capture the fine engraving without ink diffusion) but with

visually intrusive chain lines.¹⁷ By 1783 Dalrymple had negotiated with James Whatman for the manufacture of wovemoulds with his own name in a lower corner, to make paper in sheets 13 x 27 inches without a disfiguring central watermark and suitable particularly for printing plates of views of land.¹⁸ He used these not only for views, but for extensive reprintings of plans in 1783.¹⁹ Two Whatman/Dalrymple papers are known, from the same moulds, the heavy cream paper from 1783, and a harder, more translucent paper used for views in the late 1780s and early 1790s.²⁰ The full-size chart plates, too large for the Whatman/Dalrymple paper, were reprinted from 1783 to the mid-1790s on an unwatermarked wove paper²¹ or a rougher wove paper watermarked 'VOLTAIRE', while the extra-large 28 x 23 inch plates of the later 1780s required a larger Whatman wove paper. The Voltaire paper was also used for reprints of plans²² and, after 1783, for printings of all half-plate large plans and small charts. New printings of the plans series in 1786 used foolscap Whatman wove paper watermarked 'JW',²³ while for the 1789 marketing exercise Dalrymple reverted to crisp laid papers watermarked 'AP' or with a scales symbol.²⁴ Contract printings for the East India Company and (of East India Company plates) for the Admiralty were on cheap unmarked wove papers.²⁵ This last appears to have been the only paper Dalrymple used outside the Admiralty after 1804.²⁶ Except where plate size dictated the exceptional use of Voltaire or Whatman/Dalrymple paper, surviving sets of Dalrymple's charts, plans and views tend to be homogeneous in their paper stock; only in the 1806-1808 area compilations are the chart papers found to be grossly mixed.²⁷ The few surviving impressions from Dalrymple's Hydrographical Office plates, datable to his lifetime, are found on to be a hard creamy Edmeads and Pine or Whatman wove, the forerunner of Admiralty chart paper.

The corollary of adopting a standard plate size was a directly inter-related set of chart scales. For the 1769 set of charts to focus on Balambangan, Dalrymple planned, besides a general chart at 60 nautical miles to 1 inch, coastal series of northern Borneo at 20 and 10 nautical miles to 1 inch, and single charts and plans at 5, 2½ and 1¼ nautical miles to 1 inch, and at 1.6 inches to 1 nautical mile, each scale being twice as large as the preceding scale in the series.²⁸ By adopting the 20 nautical mile scale, Dalrymple could construct plane charts (his preferred projection for tropical waters²⁹) of 8° x 6° at 3 inches to 1 degree to fit precisely the useable area of 24 x 18 inches on a full plate. This was also the scale and plate size he intended for the series of coastal charts outlined in 1779, each chart at 3 inches to 1 degree to cover 6° or 8° of latitude depending on format.³⁰ Seventy-seven of the 81 plans in *A Collection of Plans of Ports in the East Indies* of 1774-75 conform to this system of scales, in which each enlargement is an arithmetical doubling of the preceding scale;³¹ Dalrymple employed it increasingly after 1779, and enunciated it formally in *Practical Navigation* [1790]:

It is very desirable to have uniformity in the Scale of Charts and Plans, because it, insensibly, conveys great knowledge and precision of ideas, concerning the relative distances and magnitudes of Places. The Mind readily can conceive the proportion of half, quarter, &c., but when it is distracted with fractional comparisons, Men do not carry along with them, that knowledge which uniformity would have produced: Hydrographers, or Geographers, seldom, however, attend to this uniformity.³²

Dalrymple used the same system of scales on Hydrographical Office charts from 1800, repeating his formula in his report of 10 October 1807³³. At the same time he was repeating his advocacy of the plane chart projection for charts of tropical waters and of a spherical projection for charts in higher latitudes, in each case in preference to Mercator's projection.³⁴

In the construction of Dalrymple's charts, once the fair drawing of a chart or plan had been reduced to the required scale, the process of engraving exhibited standard features. The coastline and islands were engraved with the burin, sometimes over drypoint guide lines. The neatline (or 'margin'³⁵), a single ruled drypoint line, defined the chart area. Outside this was the inner border, also a single ruled drypoint line, and the drypoint lines casing the border proper, to be routed out by burin or by repeated use of the drypoint. The scale intervals were also marked with the drypoint in the border area. Drypoint lines were often used to mark rocks, shoals and ships' tracks for subsequent entry with burin, drypoint stipple or roulette. These three tools were part of the armoury of the hills engraver, who entered the coastline profiles and any separate lines of views of land.³⁶ Alternatively the graphic representation of hills was etched with acid. The meridian and parallel, the vertical and horizontal lines, were drawn over the face of the chart area with the drypoint. The north arrow (usually half an ornate pointer) was engraved on the meridian line or on the production of that line in or outside the border. Finally the writing engraver inserted all the title, imprints, notes, names, and soundings.

Small-scale charts had other features to be engraved: the latitude and longitude graduations, and the network of meridians and parallels based on those graduations (often replacing the single vertical and horizontal from the plan).³⁷ The writing engraver entered the numerical values on the graticules, often leaving longitudes based on a local prime meridian unnumbered.³⁸ Plates of views of land by-passed many of the stages of plan or chart engraving: drypoint guidelines for hill silhouettes usually provided the basis for the hills engraver to use his variety of tools, or for a simple burin horizon outline where that was required.³⁷

Particular engraving and etching skills were not necessarily restricted to particular individuals. Dalrymple first used Thomas Jefferys, for the chart of the South Atlantic Ocean in 1769.³⁹ Benjamin Henry graduated the first Borneo map for Jefferys to engrave, also in 1769.⁴⁰ Henry then graduated and engraved the next charts in *A Collection of Charts and Memoirs*, with David Lerpeniere etching the hills and William Whitchurch undertaking the writing engraving.⁴¹ Dalrymple entered into a closer relationship with Henry during the production of the plans for *A Collection of Plans of Ports in the East Indies* 1775. Though the imprints of most plans record the engravers as J. Russell, S. Pyle, W. Palmer, and W. Whitchurch, Dalrymple states that for the first twenty plans at least, Henry drew in the plans and most of the marginal lines.⁴² To depict coastal hills, Henry experimented with the use of different tools, the drypoint, the diamond point, the roulette or 'wheel tool', and with snakestone.⁴³ As a consequence of the fugitive nature of the stone engraving, under burnishing pressure from the paper going through the press, Dalrymple had Henry re-engrave five stone-engraved plates for re-issue in 1775.⁴⁴

Until 1775 Dalrymple was a customer of established commercial engravers, but he thereafter employed Henry directly, as artist and engraver on his voyage to India.⁴⁵ Henry's imprints on five views of towns in southern India suggest that his particular strength was not in writing engraving.⁴⁶ On his return he continued to engrave for Dalrymple until his death in 1781 or 1782. The 1779 map of the Madras Lands marks a change in Dalrymple's engravers: in a complex piece of work the reduction of Barnard's map, the outline and the paddy fields were Henry's work, the hills and tanks were engraved by Patrick Begbie, and the writing by William Harrison.⁴⁷ Begbie was an artist-engraver who also served as an East India Company ship's purser: he engraved and etched some of the more decorative views on Dalrymple's

plans from 1774 to 1781, and died in the *Earl of Hertford* when it sank in Madras roads on 15 October 1782.⁴⁸

Harrison became Dalrymple's chief engraver in the 1780s, after Henry's death,⁴⁹ and Thomas Harmar first appeared as a writing engraver for Dalrymple in July 1779.⁵⁰ There is no reason, from the imprints on charts, plans and views, to suppose that there was a formal division of labour: both are recorded in each category on many plates. The hills work, after 1781, and increasingly after Begbie's death, was entrusted to his former pupil John Walker,⁵¹ later employed by Dalrymple in the Hydrographical Office. Walker did not generally enter his name on plates on which he worked, until late in the 1780s when he retrospectively added his name to a number of earlier plates.⁵² Though Dalrymple used Harrison, Harmar and Walker extensively, he did not, at this time, employ or monopolise them. Each had his own engraving business.⁵³ The system by which Dalrymple's plates were moved among engravers, and proofed and printed, is now obscure, as is any information about the use of Dalrymple's rolling-press after he moved from Soho Square to Titchfield Street in 1780.

Dalrymple put his 1774-75 plates through a process of revision between 1779 and 1782. As originally published, the plan plates depended on a separately printed compass rose for users to add radial or rhumb lines to the plans for compass bearings.⁵⁴ This was Dalrymple's innovation in 1774 to avoid congesting the chart area of simple plans with a lattice of rhumb lines. From 1779 onwards he changed to a system of engraving short lengths of the radial lines between the neatline and the inner border line on each plan, so that users could pencil in the intervening line as required.⁵⁵ All the 1774-75 plan plates were so revised after 1779, the alteration sometimes consisting only of the addition of these radial lines. Subsequently the method of showing

compass bearings was changed to a system of bold dots engraved outside the border of the chart or plan. Later the current form of radial line marking was often added to previously published plates undergoing alteration,⁵⁶ and, as the system of dots changed four times between 1782 and 1786,⁵⁷ this assists the dating of corrections to plates. Apart from basic alterations to a plate, typically the addition of a new plan or view, there were many silent corrections carried out in the 1780s, often no more than the addition of a diacritic on a letter in a title or of a comma in a note. These systematic sequences of minor corrections often cannot be dated more closely than to the general reprinting exercises of 1783, 1786 and 1789.

William Harrison's emigration to Philadelphia in 1794 affected the continuity of Dalrymple's chart and plan series.⁵⁸ There was a reserve of plans engraved by Harrison, which Dalrymple exhausted only in 1796, but Harrison's departure interrupted, and effectively halted, the regular series of annual publications of charts, views and plans. This reason for the termination of formal publication in 1794 has been masked by Dalrymple's assumption of Admiralty office in 1795, but the momentum of his East India Company publication was lost, and was not regained until after Isaac Palmer began engraving regularly for Dalrymple in 1796.⁵⁹ In the late 1790s Dalrymple was providing work for Palmer, Harmar and Walker, as well as employing Walker as his assistant in the Hydrographical Office.⁶⁰

The eventual installation of a rolling-press in the Hydrographical Office in 1800 predicated the organisation of an engraving shop. Dalrymple 'was desired to look out for Engravers, &ca.'⁶¹ to work under the superintendence of John Walker. Isaac Palmer was appointed an engraver, and was joined, on John Walker's recommendation,⁶² by John Cooke. Thomas Harmar was employed specifically as a writing engraver,

and, unlike Palmer and Cooke, was paid at piecework rates.⁶³ Harmar applied in 1804 to be paid by time, but Dalrymple declined to recommend it, perhaps on account of an irregular flow of plates from the plan engravers for writing.⁶⁴ Dalrymple generally favoured plan engravers who could also do the writing engraving,⁶⁵ and in Palmer he had such a versatile employee.⁶⁶ There was generally less work for a hills engraver in the Hydrographical Office than for East India Company plates, and the absence of John Walker's name from the imprints of Dalrymple's Hydrographical Office charts has been used to argue that he did no Office engraving for Dalrymple.⁶⁷ It is difficult to support such an argument while Cooke's name appears as engraver on only one chart in his six-year association with the Office.⁶⁸ When Palmer died, late in 1805, and Cooke was dismissed, on 21 August 1806, Dalrymple filled Cooke's post immediately with Edward Mitchell, previously a Dalrymple family retainer,⁶⁹ whose natural ability he developed by training.⁷⁰ Palmer's post he filled eventually in June 1807 with Richard Bailey (or Baily), son of the copper-plate printer.⁷¹ Apart from Mitchell's documented test-piece, neither Mitchell nor Bailey appears to have done any significant writing engraving for Dalrymple.⁷²

One consequence of employing the same engravers for his private and official work was a natural tendency to follow, in the Hydrographical Office, the chart production conventions which Dalrymple had introduced for East India Company charts, such as scale ratios and systems for indicating rhumb line positions. Hurd gave instructions for both to be changed when he took over the Hydrographical Office after Dalrymple's death. Consequently plates which were begun by Dalrymple, but finished under Hurd, exhibit the Dalrymple style of borders, with sequences of marginal dots, while plates begun under Hurd have a plainer border and the rhumb line positions indicated by full compass roses engraved in the chart area proper.⁷³

The flow of engraving and printing work in the Hydrographical Office under Dalrymple was irregular. As early as 1803 he proposed to have the engraving of new plates from foreign published charts carried out outside the Office, to free the engravers to work in the Office on engraving from manuscript material,⁷⁴ but he did not convincingly rebut Cooke's later criticism that the engravers were sometimes at a stand for days at a time.⁷⁵ The copper-plate printer, Richard Baily, was able to take 81,700 impressions from 817 of Dalrymple's East India Company plates between early 1805 and October 1806 by working 'as expeditiously as the Current Business of the Office will allow'.⁷⁶ The disbursements budget of the Hydrographical Office was small, only £50 (later £75) a year,⁷⁷ and the output commensurately small, fewer than sixty finished charts in seven years from November 1800 to April 1808. Many of these were the large double-elephant chart plates, 39 x 25½ inches, unwieldy and requiring a considerable amount of work at each stage of engraving.⁷⁸

Palmer, Harmer and Walker continued to work on Dalrymple's charts, views and plans for the East India Company during the period of their Hydrographical Office employment. Cooke, perhaps jaundiced as the only engraver not so employed by Dalrymple, was openly critical of Dalrymple, accusing him of conducting his private work at the Hydrographical Office.⁷⁹ There is no evidence surviving in official correspondence, not even in the papers concerned with Dalrymple's dismissal, suggesting a perception of impropriety in his use of official time or resources. The operations of drafting, engraving and printing were so much under Dalrymple's direct management in his two offices, with common personnel, that a natural homogeneity of style and presentation resulted. In these circumstances it is significant that the security requirements of the Hydrographical Office were carefully preserved: no known set of

Dalrymple's publications from East India Company or private provenance includes any Hydrographical Office charts.

Dalrymple's use of letterpress printers followed a similar pattern to his developing domination of the work of particular engravers. His early letterpress cannot easily be attributed to particular printers in the jobbing printing trade in London, but, with his increasing requirement for the composition of technical matter, he quickly gravitated to a working relationship with a particular printer who could meet his needs. This printer was George Bigg, whose name first appeared on a Dalrymple title-page in 1783.⁸⁰ Bigg was an effective, though hardly stylish, compositor with an aptitude for setting tabular extracts from ships' journals. Dalrymple used Bigg to the exclusion of all other printers until his disappearance from the scene early in 1795. The characteristics of Bigg's printing for Dalrymple are a small type area with wide margins, no running titles, page numbering centred above the text in parentheses, frequently side notes or shoulder notes, printed on half-sheets of wove paper. Dalrymple's requirements frequently entailed correction in the forme, cancellation of single sheets (rarely cancellation of individual leaves), and facsimile re-setting after premature distribution of type. Bigg's was a small operation in the late 1780s: on large jobs type was rarely kept standing longer than a few weeks.

Dalrymple certainly began to use Bigg earlier than 1783: his nautical memoirs of 1781 show similarities of typesetting, but without a confirming printer's imprint.⁸¹ Bigg has been documented as the printer of *A Collection of Plans of Ports in the East Indies* 1775, and therefore of the individual parts in 1774.⁸² It is possible then to argue on stylistic grounds that *A Letter from Mr. Dalrymple to Dr. Hawkesworth* 1773 and *Mr. Dalrymple's Observations on Dr.*

*Hawkesworth's Preface to the Second Edition 1773*⁸³ were also Bigg products. This in turn invites the inference that the constituent parts of *A Collection of Charts and Memoirs 1772*⁸⁴ may have been the early work of the same compositor, particularly as there is a demonstrable connection in the early 1770s between Bigg and Elmsley, with whom Dalrymple was already in close contact. George Bigg was in partnership with Edward Cox as a firm of printers at 405 Strand from the late 1760s, until their premises were destroyed by fire on 2 March 1776. These premises also served as Peter Elmsley's warehouse, which was destroyed in the same fire.⁸⁵ The Bigg and Cox partnership dissolved with the Strand fire, Cox establishing himself in Great Queen Street as official printer to the East India Company, and Bigg continuing in business alone, though with no specific address until he is recorded at Chelsea in 1785. Not enough is known of Bigg's other output to form definite conclusions, but he is known to have printed verse and technical pamphlets. The appearance of his name as printer on *Certificates and Circumstances* for John Arnold, on *A Companion to a Map of the World* for Aaron Arrowsmith, and on works for Charles Nourse is sufficient to link him closely with the Dalrymple-Elmsley nexus.

In the early 1770s, before Bigg became his regular printer, Dalrymple used the firm of Murray and Cochrane in Edinburgh, particularly for setting French and Spanish. In 1773 his brother James oversaw the printing of 'Extrait d'un Journal de Navigation pour un Voyage de la Mer du Sud ...' for *A Collection of Voyages chiefly in the Southern Atlantick Ocean 1775*,⁸⁶ and in the same year Murray and Cochrane printed the 'Arias Memorial' for him.⁸⁷ The particular fount of type and compositorial conventions used in the 'Arias Memorial' are present also in the French 'Extrait d'un Journal ...' and in the Manuel Correa and Don Antonio Gil descriptions of the Philippines which Dalrymple

had obtained in 1761.⁸⁸ These tie all five printed pieces to Murray and Cochrane, who were acquiring a reputation in Edinburgh for foreign-language composition.⁸⁹ By comparison, the composition of the Spanish text appended to *A Letter from Mr. Dalrymple to Dr. Hawkesworth*, probably by Bigg, is of markedly inferior quality.⁹⁰

Bigg's departure in 1795, whether through illness, retirement or death, disrupted Dalrymple's letterpress publication as much as Harrison's emigration affected his chart and plan production. Dalrymple made some use of the Admiralty printers, William Bennett and George Roberts, but had no regular printer until he established a new relationship with William Ballintine in 1806. For his exercise in re-publishing nautical memoirs, Dalrymple found Ballintine as resourceful and accurate in setting technical matter as Bigg had been fifteen years earlier.⁹¹

With all the engravers and printers he employed on a regular basis Dalrymple rapidly established an interactive relationship, based on his own interest in the technical processes they employed. With Harrison, Palmer, Walker and Harmar as engravers, and with Bigg and Ballintine as printers, Dalrymple had sufficient demands of them to become their main customers. Though each had their own businesses, the bulk of their known surviving (and identifiable) work consists of the commissions Dalrymple gave them, and in turn they are known chiefly for the work they did for him. As Dalrymple continued to use the same engravers and printers throughout a long publishing life, their engraving styles and compositorial preferences have, by transference, become identified as the typical features of Dalrymple's publications.

NOTES TO CHAPTER 7: 'MAKING CHARTS AND DRINKING TEA'

* 'I saw your brother two days ago, at his old occupation of making charts and drinking tea. He has a little eruption on his skin, for which he is certainly the better, though he will not allow it.' (Earl of Morton to Sir David Dalrymple, 18 January 1788 (Newhailes Papers (NLS: MS. 25304, f. 123))).

¹ Dalrymple to Beaufort, 27 May 1808 (San Marino, California, Henry E. Huntington Library: Beaufort Collection).

² See, for example, Catalogue B162 791110 Suez and B1063 060531h Suez.

³ For example, *Memoir of a Chart of the N W Coast of Madagascar* 1806 (Catalogue A230), or *Directions for the Mouth of Río de la Plata* 1808 (Catalogue A253).

⁴ *Plan for Extending the Commerce of this Kingdom* 1769, first issue, advertisement, p. 109.

⁵ See the tables of stated dimensions in *List of Plans of Ports, &c.* 1783.

⁶ For collections in which the letterpress and plans were bound interspersed, see, for example, Oxford, Bodleian Library: 5.A.195-203, and Providence, Rhode Island, John Carter Brown Library: 69-310-69-314.

⁷ Dalrymple to Boulton, 25 April 1774 (Birmingham Reference Library, Archives Department [BRL]: Matthew Boulton Papers, Letter D22).

⁸ For example, Catalogue B663 910627a Malabar Coast.

⁹ East India Company, Court Minutes, 3 November 1784 (London, India Office Records [IOR]: B/100, p. 580): 'Resolved ... That Mr. Dalrymple be directed in future to keep a Cash Account particularizing on every day all Monies he may disburse; and that he be further directed to bring to immediate account the cost of the Paper and Plates remaining on hand, and to send in his Cash Account for examination every half Year; also to deliver in an annual Statement of his Disbursements as usual, with an Estimate subjoined of the costs of the Paper and Plates that may be remaining on hand, the Court approving of the principle of statement, so far as it is calculated to shew the whole expence of every Plate and the Number of Plates completed in each Year.'

¹⁰ Dalrymple to Boulton, 31 March 1800 (BRL: Matthew Boulton Papers, Letter D29).

¹¹ The first such double-elephant chart was Catalogue B950 021011 Southampton River. Dalrymple used this size commonly thereafter for English Channel and North Sea coastal charts, and it thereafter became the basic size for Hydrographical Office charts.

¹² 'Mr. Thomas Harmer The Writing Engraver has stated to me the great difference between working on large Plates and those of a smaller size and as the Admiralty Plates are generally large, he requests to be allowed to charge 2s. p[er] hundred words more for Plates of 25½ Inches by 19½ Inches and 2s.6d. p[er] hundred words on Plates of a larger size the present Price is 16s. p[er] hundred Words. I am very sensible There is a great difference to the Writing Engraver in the size of the Plates ...' (Dalrymple to Pole, 11 November 1807 (London, Public Record Office [PRO]: ADM.1/3522)). Harmer's argument, not

re-stated by Dalrymple, was almost certainly based on the need to swivel the plate through 180° under the burin repeatedly during the formation of engraved letters. On these engraving techniques see Roy J. L. Cooney, 'Chart Engraving at the Hydrographic Department 1951-1981', *The Cartographic Journal* 23 (1986), pp. 91-98, particularly p. 95.

¹³ See chapter 2, p. 60 above.

¹⁴ For stone-engraving, see p. 224, n. 43 below; for the plans re-issued, see chapter 3, p. 78 and n. 64 above.

¹⁵ Catalogue B143 790301 Choromandel, first issue. The complete map, printed from three base plates, measured 46 x 25 inches. The two southerly plates were printed together on double-elephant sheets of French laid paper, and the northern sheet printed separately on slips for later assembly. For examples, see London, British Library [BL]: 6.TAB.21, and Maps 181.m.1.(Asia #38-2.).

¹⁶ Catalogue B143 790301 Choromandel, second issue. The three plates forming the complete map (see note 15 above) were printed together on a pre-formed sandwich formed composed of parts of four sheets of 22 x 18 inch Whatman wove paper (watermarked 'JW'), pasted onto a carrier of a sheet of 38 x 24 inch Whatman laid paper (watermarked 'J WHATMAN') augmented by an additional strip of the same laid paper. For examples, see BL: 52600.(31.) #185, and 52615.(1.).

¹⁷ For examples, see plates of views of land in IOR: X/3625, and BL: Maps 147.e.17.

¹⁸ On Whatman's wove paper generally, see Thomas Balston, *James Whatman, Father & Son* (London, 1957), particularly pp. 40-42 and 60-61. In the list (p. 61) of wove moulds made for Whatman between 1780 and 1786, there are none recorded which match the Whatman/Dalrymple described here.

¹⁹ For example, the 'large-paper' set of plans and views which Dalrymple sent to Fleurieu in September 1783 (Dalrymple to Fleurieu, 4 September 1783 (Paris, Bibliothèque de l'Institut de France: MS. 2325 (NS cccxxv), 16). For this Dalrymple had his 9½ x 12½ inch plans assembled in rows of three, and printed together on sheets of this 'long' wove paper. Fleurieu did not have them separated, and many such sheets survive in Paris, Archives Nationales: Marine 6JJ 63.

²⁰ For examples of the thinner Whatman/Dalrymple paper, see BL: 435.k.18, and copies of *Oriental Repertory: [Volume 1] Number 2* 1791 which include the first state (without inset) of Catalogue B684 911124 Ava River/Rennell. As first engraved, this map was too long to be printed on the unwatermarked wove paper normally used for *Oriental Repertory* engravings.

²¹ See, for example, charts in BL: 6.TAB.21.

²² See, for example, the collection of Dalrymple's plans formed in 1785 and now in New York, Hispanic Society of America Library.

²³ See, for example, plans in BL: 6.TAB.19.

²⁴ See, for example, plans in Göttingen, Niedersächsische Staats- und Universitätsbibliothek: quer 2° H.As.II, 112.

²⁵ See, for examples, the collections at IOR: X/3627/1-2, and surviving charts, some with a 'J RUSE' watermark in London, Naval Historical

Library collections.

- 26 Collections of plans extending to 1807, for example the Marsden collection (London, School of Oriental and African Studies: EX.43. 12134; and EX.43. 14747.), normally have plans up to 1804 on 'JW' wove paper or 'AP' laid paper, but the later plans uniformly on the same cheap unmarked wove used for the contract printings.
- 27 See the collections mentioned in chapter 5, nn. 147-155 above.
- 28 *Plan for Extending the Commerce of this Kingdom* 1769, first issue, advertisement, pp. 109-111.
- 29 *Practical Navigation* [1790], chapter 3, pp. 92-94 (paras. 126-127).
- 30 *Notwithstanding the many years that the Europeans have navigated to India ...* 1779, pp. 2-3. The plate size is not stated, but may be calculated simply from the statements of the scale to be used and the latitude ranges to be covered by portrait- and landscape-format charts.
- 31 The scales Dalrymple used are these: 20, 10, 5, 2½ and 1¼ nautical miles to 1 inch (equivalent to 0.05, 0.1, 0.2, 0.4 and 0.8 inches to 1 nautical mile), and 1.6, 3.2, 6.4 and 12.8 inches to 1 nautical mile. In *A Collection of Plans of Ports in the East Indies* 1775, only Catalogue B43 740205f Kings Island Road (4 inches to 1 nautical mile), B47 740205j Mew Bay (2 inches to 1 nautical mile), B50 740205m Point Romania (1 inch to 1 nautical mile), and B71 740225m Padang Settlement (1 inch to 1 nautical mile) do not conform to these scales.
- 32 *Practical Navigation* [1790], chapter 3, pp. 49-50 (paras. 4-8).
- 33 Dalrymple to Pole, 11 October 1807, pp. 9-10 (PRO: ADM.1/3522). The Chart Committee rejected Dalrymple's system of scales (Chart Committee to Pole, 26 May 1808 (PRO: ADM.1/3523; and p. 272 below)).
- 34 *Essay on Nautical Surveying* 1771, fourth edition 1806, pp. 54-61. The Chart Committee also rejected the spherical projection in May 1808 (see note 33 above, and Conclusion, p. 272 below).
- 35 *Plans of Ports 1* 1774, advertisement: 'the Marginal Lines'.
- 36 *A Collection of Plans of Ports in the East Indies* 1775, introduction, pp. 7-8. Dalrymple publicised the use of the roulette to the Royal Society (Dalrymple to Morton, Royal Society, 23 June 1774 (London, Royal Society: Letters & Papers VI, item 65)).
- 37 For the engraving of the graduation on Catalogue B11 690400 South America, see *Memoir of a Chart of the Southern Ocean* 1769, pp. 7-8.
- 38 For examples of unnumbered longitude graticules, see Catalogue B13 691020b Borneo and B14 691026 Cuddalore/Palawan.
- 39 See chapter 2, p. 59 above.
- 40 Catalogue B13 691020b Borneo.
- 41 Catalogue B15 701130 Felicia, B33 710121 China, B34 710419 China Sea, B36 711210 Sooloo Archipelago, and B37 720915 Bay of Bengal.
- 42 *Plans of Ports 1* 1774, advertisement.
- 43 Andrew S. Cook, 'Alexander Dalrymple's *A Collection of Plans of Ports in the East Indies* (1774-1775): A Preliminary Examination', *Imago Mundi* 33 (1981), pp. 46-64. The statement by Lanegran (David A. Lanegran, *Alexander Dalrymple: Hydrographer*, Ph.D. Minnesota, 1970,

p. 134), that Henry's 'engraving with stone' recorded a use of lithography twenty-five years before Senefelder's invention of the process, is unfortunately erroneous.

⁴⁴ See chapter 3, pp. 78-79.

⁴⁵ See chapter 3, pp. 83-84.

⁴⁶ Catalogue B136-B140 780915a-780915e.

⁴⁷ Catalogue B143 Choromandel.

⁴⁸ East India Company List of Shipping to India ... 1673-1790 (BL: Add. MS. 38872; photocopy at IOR: Photo. Eur. 111); East India Company, Marine Records, Receipt Book of *Earl of Hertford*, 1781-1782 (IOR: L/MAR/B/791A).

⁴⁹ Harrison's name appears more times than any other on Dalrymple's charts and plans for the East India Company between 1780 and 1793, either as engraver ('sc.') or as writing engraver.

⁵⁰ Harmar's name first appears as the writing engraver of Catalogue B150 790728b Brazil views, of which the views were etched by Begbie. Harmar's name appears regularly thereafter as engraver ('sc.') or writing engraver ('scr.').

⁵¹ *General Introduction to a Collection of Plans of Ports &c. in the Indian Navigation* 1783, pp. 34-35.

⁵² The earliest plan to bear Walker's name from its first engraving is Catalogue B342 830801 Durmapatam. Catalogue B332 830207 Matatanné had Walker's name added later. Many earlier plans ascribed to Walker in *General Introduction to a Collection of Plans of Ports &c. in the Indian Navigation* 1783, pp. 34-35, do not bear his name. It is generally unwise to base any argument on the absence of, or the frequency of occurrence of, an engraver's name in a Dalrymple plate imprint.

⁵³ For Harmar, see Ian Maxted, *The London Book Trades 1775-1800: A Preliminary Checklist of Members* (London, 1977). For Harrison and Walker, see R. V. Tooley, *Tooley's Dictionary of Mapmakers* (Tring, 1979). Tooley must be treated with caution for both these family names, as he both conflates and splits family members. For example, the 'James Walker' whom he records as engraving Rennell's map for Mungo Park, *Travels in the Interior Districts of Africa* (London, 1799), was in fact the John Walker discussed here.

⁵⁴ Catalogue B58 740205u Compass rose diagram. 'As some People wish to have the Rhomb Lines to their Charts, I have given a small Plate with the Points of the Compass, whereby any Person will be enabled, with little trouble, to draw the Rhomb Lines, by affixing this Plate over the Meridian and parallel, to each Plan.' (*A Collection of Plans of Ports in the East Indies* 1775, introduction, p. 6).

⁵⁵ 'I have added the Rhomb Lines in the Margins of all the Plates.' (*A Collection of Plans of Ports in the East Indies* 1775, second edition 1782, introduction, p.1).

⁵⁶ For example, Catalogue B82 740630 Gingerah, and B311 820901b Madagascar/Yvondrou.

⁵⁷ The system of border lines was in use until early 1783. In late 1782 dots appeared instead in the plate margins (outside the borders) of new

charts, as a sequence of 1 2 1 3 1 2 1 dots marking the subsidiary points between each pair of cardinal points. This remained in use until early 1785, when the dots in the seven-point sequence were changed to 1 2 3 4 3 2 1. Almost immediately in early 1785 the four-dot mark was changed from a radial line of 4 dots to a diamond of four dots on the ray line. From mid-1785 a drypoint line was drawn through the diamond to form the ray. After late 1786 the dots at all points were augmented by radial lines in the plate margin.

⁵⁸ For William Harrison, see David McNeely Stauffer, *American Engravers upon Copper and Steel* (New York, 1907), part i, pp. 121-122.

⁵⁹ The first plate on which Palmer's name appeared is Catalogue B801 960312 Se Beeroo.

⁶⁰ See chapter 5, p. 162 above.

⁶¹ Dalrymple to Pole, 23 December 1807 (PRO: ADM.1/3522).

⁶² 'I knew nothing of Mr. Cooke's Character but Mr. Walker having given me some Specimens of his Work I recommended him to be employed as an Engraver ...' (Dalrymple to Pole, 23 December 1807 (PRO: ADM.1/3522)).

⁶³ Cooke to Board of Admiralty, 19 April 1804 (PRO: ADM.1/3522); Dalrymple to Pole, 11 November 1807 (PRO: ADM.1/3522).

⁶⁴ 'The Writing Engraver applied to be put on the same footing as the Plan Engravers, to be paid by time, instead of being paid for the number of words, but I did not think it right to recommend that innovation.' (Dalrymple's endorsement on Cooke's letter to Board of Admiralty, 19 April 1804 (PRO: ADM.1/3522)).

⁶⁵ Dalrymple to Pole, 23 December 1807 (PRO: ADM.1/3522).

⁶⁶ For example, 'Palmer Scrip. [or script.]' on Nellson's Istria series: Catalogue B957 030308 Parenzo, B958 030315 Paran Bay, B959 030318 Citta Nova, etc.

⁶⁷ Andrew C. F. David, 'Alexander Dalrymple and the Emergence of the Admiralty Chart', in Derek Howse (ed.), *Five Hundred Years of Nautical Science* (London, 1981), pp. 153-164, particularly pp. 156 and 161.

⁶⁸ Catalogue B925 010911d Spain/Cape Corrobedo.

⁶⁹ Mitchell had been footman to Elenore Dalrymple, widow of Admiral John Dalrymple, who was Alexander Dalrymple's father's second cousin (Dalrymple to Pole, 23 December 1807 (PRO: ADM.1/3522); *Scots Peerage*).

⁷⁰ 'Mr. Mitchell the young Man who he [Cooke] says "knew no more of Engraving than his young Apprentice" had engraved the Views of the Hills about Cheltenham, and the Plan of that Place and its Environs, Proofs of which were shewn before Their Lordships approved of his being appointed: hius Conduct in the Office has been exemplary, and I am informed he executes much more Work, in the same time, than Mr. Cooke did — How well let the Plan of Lisbon &ca. testify. It is very true this young man had been Footman to the late Admiral Dalrymple's Widow, who sent him to me with his Portfolio of Drawings, which he had made without any Master but Nature, to know if I could give him anything to do; I was much struck with some of them, and employed him

to make Drawings, from Pictures of Sea-pieces, to shew the progress of Wind from a Calm to a Storm: I carried him down to Cheltenham, where (altho' no Engraver myself) I taught him to etch, and he taught himself the use of the Graver. He learnt from me to take angles with the Hadley & Surveying. I have no reason to be ashamed of having recommended him to his present employment but I was under no obligation to have employed him, myself, any longer than I chose.' (Dalrymple to Pole, 23 December 1807 (PRO: ADM.1/3522)). For Mitchell's work at Cheltenham, see Catalogue B1010 050301b Cheltenham view, B1011 Bays Hill Lodge view, and B1069 061011 Cheltenham.

71 Dalrymple to Marsden, 22 June 1807 (PRO: ADM.1/3522). 'The other Person, Mr. Bailly, who is employed as an Engraver in The Office had done the Plate of a Building in the Savoy before I knew him; I encouraged him to apply to engraving Plans & Writing. His Plan of Port Mornington and that of the Building in the Savoy were shewn before he was, with their Lordships approbation appointed.' (Dalrymple to Pole, 23 December 1807 (PRO: ADM.1/3522)).

72 'I thought it should be desireable not to employ any Engraver in the Office, who could not also engrave Writing if occasion should require, which Mr. Mitchell applied himself to learn, and engraved a Chart of the lower part of the Red-Sea for me.' (Dalrymple to Pole, 23 December 1807 (PRO: ADM.1/3522)). For Mitchell's test-piece, see Catalogue B1068 061001 Abissinia & Nubia.

73 For an illustration of the two types of border, see David, 'Alexander Dalrymple and the Emergence of the Admiralty Chart', p. 161. The last chart to be issued with a Dalrymple border is Catalogue B1114 100901 England/Blackwood Point. For a pair of charts exhibiting the different characteristics, see Catalogue B1106 090401 Brest, and 'A Survey of the New Channel into the Four Passage from the Bay of Brest, by Capt. Thomas Hurd, R N 1807' (Hydrographical Office, 12 April 1809). The former was prepared to Dalrymple's specification, the latter to Hurd's.

74 Dalrymple to Nepean, 27 May 1803 (PRO: ADM.1/3522).

75 'In regard to his preceding Remark, I do not know of any instance where Business has been at a Stand from my absence.' (Dalrymple to Pole, 23 December 1807 (PRO: ADM.1/3522)).

76 Dalrymple to Marsden, 23 August 1805 and 31 October 1806 (PRO: ADM.1/3522).

77 Dalrymple to Pole, 11 November 1807 (PRO: ADM.1/3522).

78 See note 12 above.

79 Cooke to Board of Admiralty, 18 December 1807 (PRO: ADM.1/3522): '[He is] sometimes so busily employed with his own private works, every one in the Office being employed by th Hydrographer on his own work which are arranged at the Office.' Dalrymple to Pole, 23 December 1807 (PRO: ADM.1/3522): 'Be pleased to ask Mr. Cooke when was he ever employed by the Hydrographer in his own Work?' Dalrymple clearly did not like Cooke: 'I have no hesitation to say I was, from his Character, glad he was dismissed.' (Dalrymple to Pole, 23 December 1807 (PRO: ADM.1/3522)).

80 *General Collection of Nautical Publications* 1783 (Catalogue A82).

81 For example, *Collection of Views of Land and of Plans of Ports in*

the East-Indies 1781 (Catalogue A70).

⁸² John Nourse's account of books left with him by Dalrymple in April 1775 (London, Royal Astronomical Society: Add. MS. 5.13) records: '48 Title & Introduction to Plans on Genoa Paper to be received from Mr. Bigg.'

⁸³ Catalogue A27 and A29.

⁸⁴ Catalogue A21, including Catalogue A22, A14, A13 and A15-A18.

⁸⁵ Maxted, *The London Book Trades 1775-1800*, s.n. Bigg, Cox and Elmsley.

⁸⁶ *A Collection of Voyages chiefly in the Southern Atlantick Ocean* 1775, introduction, p. 1, and 'Extrait d'un Journal ...'.

⁸⁷ *Señor. El Doctor Iuan Luis Arias, dize ...* 1773.

⁸⁸ *Descripcion segura y verdadera ...* [1773]; *Derrota del Purto de Cavite al Embocadero de San Bernardino ...* [1773]; and *MS. A. De Romblon a la punta de Bulacava ...* [1773] (Catalogue A31-A33). These printings are dated to 1773 on the basis of their attribution to Murray and Cochrane, and of the Murray and Cochrane colophon to *Señor. El Doctor Iuan Luis Arias, dize ...* 1773.

⁸⁹ Information from the card-index of Edinburgh imprints maintained by the National Library of Scotland Rare Book Department, courteously made available by Mr. John Morris.

⁹⁰ *A Letter from Mr. Dalrymple to Dr. Hawkesworth* 1773, pp. 34-35.

⁹¹ For the projects in which Dalrymple involved Ballintine, see chapter 5, pp. 175-176 above, and chapter 9, pp. 255-256 below.

CHAPTER 8

'SOME NOTES USEFUL':*

DALRYMPLE'S TECHNICAL WRITINGS, 1765-1808

Dalrymple's technical writings over more than forty years form a small group distinct from his topographically-based nautical memoirs. Their texts, on aspects of nautical surveying, journal-keeping, and chronometer use and maintenance, have a close inter-relationship, as Dalrymple habitually re-used, re-worked and re-distributed paragraphs. Only the basic *Essay on Nautical Surveying*, written before 1765 and still undergoing revision in a fourth edition in 1808,¹ appeared in Dalrymple's lists of his own publications.² Others, particularly the ephemeral leaflets of instructions for chronometer use, once common,³ now survive in so few libraries and archives that it has been difficult in the past to obtain an overview of them or of Dalrymple's intentions in preparing them.

Dalrymple's first essay, largely written before his return to England in 1765, encouraged ships' officers in the practice of taking observations regularly for working up into sketches, using the Hadley quadrant held horizontally for circles of bearings, and establishing base-line distances surveys by observing the speed between ships or the sound of cannon-fire.⁴ The *Essay* has been conventionally seen as more theoretical than Murdoch Mackenzie's near-contemporary *Treatise*.⁵ In the general 1786 republication Dalrymple re-issued the *Essay* practically unchanged.⁶ Meanwhile he had issued for the Choromandel Coast a proposal for a type of survey relying on ship observations in conjunction with a chain of signal flags on shore.⁷

In the 1786 *Essay* Dalrymple announced that he had written an 'Elementary Treatise of Practical Navigation and Nautical Astronomy'.⁸ He added to it in the late 1780s, and two proof copies of parts of three chapters entitled 'Practical Navigation' are known.⁹ For the bulk of the third chapter (almost half the whole) he reprinted, slightly re-cast, the 1771/1786 *Essay* and the 1784 *Proposition* together.¹⁰ The remainder of 'Practical Navigation' comprises definitions of mathematical, geographical, astronomical, topographical and climatic terms for nautical surveying.¹¹ It is chiefly remarkable for Dalrymple's first statement of his system of co-ordinated scales for charts and plans,¹² for his controversial advocacy of the plane chart and spherical projections for coasting charts,¹³ and for the table of winds which acknowledged his debt to John Smeaton's work on windmills and established his position as the progenitor of the nautical wind scale later adopted by Beaufort.¹⁴ The new edition of the *Essay* in 1806 repeated from 'Practical Navigation' the reworking of the 1786 *Essay*, adding a section on Dalrymple's newest idea, 'Of Surveying by Quincunx', in which he proposed observations with a group of five ships or boats maintaining station.¹⁵ The 1806 *Essay* exists in two forms, the first in 1806 with 'Form of the Journals of the East India Company's Ships' descended from a separate leaflet of 1779,¹⁶ and the second in 1808 without the journal forms but including five plates of diagrams, three from 1771 and 1785, and two proposed for 'Practical Navigation' but not engraved until February 1808.¹⁷

The 'Form of the Journals' had its origin in January 1778, in Dalrymple's ideas for the shipboard use of chronometers after consultation with John Arnold.¹⁸ In a leaflet of propaganda and instructions on how to lay down tracks Dalrymple established both a list of reliable longitudes and a form of journal to carry the longitude by chronometer along tracks.¹⁹ Between then and the issue of a revised

leaflet in 1779,²⁰ Dalrymple introduced the scheme of numbering wind strengths²¹ which he set out more fully in 'Practical Navigation',²² and produced sample journal forms from engraved plates.²³

In 1779 or 1780 Dalrymple issued *Some Notes useful to those who have Chronometers at Sea*, with instructions on the principles of calculating longitude from time differences, and on the calculation of apparent time from observations of meridional solar altitudes, with a form.²⁴ To these he added in 1786 a leaflet on the care and winding of the chronometers sent to Bombay,²⁵ and a separate leaflet in 1787 with worked examples of time calculations.²⁶ The texts of all three leaflets were combined in 1788 in *Instructions concerning Arnold's Chronometers*, which remained the standard manual even after Dalrymple's death, and which was re-set in type and reprinted at least three times before 1815.²⁷

In the technical rivalry among chronometer makers, Dalrymple assumed the rôle of champion for Arnold at least in 1782, and possibly as early as 1780. Dalrymple's coining of the term 'chronometer'²⁸ in *Some Notes useful to those who have Chronometers at Sea* was echoed in 1780 in the first issue of Arnold's *An Account ... of the Going of a Pocket Chronometer*. For the second issue of *An Account* Dalrymple added a propagandist preface.²⁹ The aggressive tone increases in three subsequent published justifications of Arnold's chronometers, and culminates in *Longitude: A Full Answer*, which appeared over Dalrymple's name in 1806 after Arnold's death.³⁰ Despite the bibliographical and typographic evidence to attribute them to Dalrymple, none appear in Dalrymple's lists of publications.

NOTES TO CHAPTER 8: 'SOME NOTES USEFUL'

- * *Some Notes useful to those who have Chronometers at Sea* [1780], title (Catalogue A64).
- ¹ *Essay on the Most Commodious Methods of Marine Surveying* 1771, First edition (Catalogue A14), and subsequent editions. Dalrymple added information to his first edition after visiting Christopher Middleton, a Hudson's Bay Company captain at Norton, near Stockton in 1775, presumably on his route to or from Newhailes in that year (*Practical Navigation* [1790], p. 72). For the 1808 revisions to *Essay on Nautical Surveying* 1771, Fourth edition 1806, see note 17 below.
- ³ *Instructions concerning Arnold's Chronometers or Time-keepers* 1788 (Catalogue A153) is known in four settings over a twenty-seven year period (see note 27 below), but only one example of each setting is known to survive.
- ⁴ *Essay on the Most Commodious Methods of Marine Surveying* 1771: First edition (Catalogue A14). A simple error on omitting the alternative case in a geometrical theorem caused the cancellation of pages 5 to 8, by the issue of substitute leaf to early recipients (see Chapter 2, p. 61, and n. 85, above). Dalrymple particularly advocated the drawing of parallel pairs of charts, one conventionally with topographical detail, and the second with lines and points of construction only (*Essay*, pp. 19-20): an example of this in practice is the engraved diagram (Catalogue B24 7100001 Grand Ladron diagram) associated with his China coast chart (Catalogue B33 710121 China).
- ⁵ Murdoch Mackenzie, *A Treatise on Maritim Surveying* (London, 1774). The strength of Ritchie's comparison (G. S. Ritchie, *The Admiralty Chart* (London, 1967), pp. 22-26) is diluted by attributing to Dalrymple's 1771 edition additions he made in 1806 concerning quincunx survey (see note 15 below).
- ⁶ *Essay on Nautical Surveying* 1771, Second edition 1786 (Catalogue A107). The third edition in 1787 (Catalogue A136) was a facsimile re-setting of the text pages of the second edition.
- ⁷ *Proposition for a Survey of the Coast of Choromandel* 1784 (Catalogue A92). The *Proposition* was incorporated as 'Memoir of a Survey of the Coast of Choromandel' in *An Hydrographical Journal of a Cursory Survey of the Coasts and Islands in the Bay of Bengal* 1784 (Catalogue A93). An engraved diagram (Catalogue B445 850117 Signal flags) was included in this re-issue, showing the different types of signal flags recommended by Dalrymple and by James Rennell, with whom Dalrymple had apparently discussed his proposal.
- ⁸ *Essay on Nautical Surveying* 1771, Second edition 1786, introduction, p. iii.
- ⁹ *Practical Navigation* [1790] (Catalogue A175). For copies, see Paris, Bibliothèque Nationale: Ge.FF.4688, and Edinburgh, National Library of Scotland: Nha.M90(3). The Paris copy has three chapters, complete except for a table of compass point names on pp. 33-34; the Edinburgh copy, from Sir David Dalrymple's library, also lacks pp. 51-54 and 71-94. Neither copy includes impressions of the plates signalled in the side notes on pp. 51-98: two of the required plates of diagrams were engraved only in 1808 (see note 17 below).

¹⁰ *Practical Navigation* [1790], chapter 3, pp. 51-98 (paras. 10-138). Dalrymple adapted the 1784 survey *Proposition* to the south coast of England in 1801: 'If Their Lordships should think it proper to complete the Survey of that part of the Coast from the Downs to the Ow[e]rs that has not been surveyed, I beg leave to suggest that the mode proposed in 1785 in the Memoir for a Survey of the Coast of Choromandel. & more circumstantially described in an unpublished Treatise of Practical Navigation P 51 to 98, would be attended with very little expense, ...' (Dalrymple to Nepean, 8 June 1801 (London, Public Record Office: ADM.1/3522)).

¹¹ Chapter 1 (pp. 1-20, paras. 1-97) is devoted to mathematical terms; chapter 2 (pp. 21-42) to geographical definitions (paras. 1-22), astronomical terms (paras. 23-44), compass points (paras. 45-50), and climate and winds (paras. 51-76); chapter 3 begins with a list of terms descriptive of types of land and water areas.

¹² Chapter 3, pp. 49-50 (paras. 4-7). See also Dalrymple's introduction to his list of charts in Dalrymple to Pole, 10 October 1807, pp. 9-10 (London: Public Record Office: ADM.1/3522), and see chapter 7, pp. 221-222 above, for a discussion of official reactions to a proposed proportionality of scales.

¹³ *Practical Navigation* [1790], chapter 3, pp. 92-97 (paras. 124-136). See also chapter 7, p. 222 above.

¹⁴ *Practical Navigation* [1790], chapter 2, pp. 38-42 (paras. 63-76). John Smeaton, *An Experimental enquiry concerning the Natural Powers of Water and Wind to turn Mills, and other Machines, depending on a Circular Motion* (London, 1759), which reprinted the paper Smeaton gave to the Royal Society in May 1759. Dalrymple's most obvious connection with Smeaton was the Royal Society Club. For a discussion of Beaufort's adoption of Dalrymple's modification of Smeaton's wind scale, see note 21 below.

¹⁵ *Essay on Nautical Surveying* 1771, Fourth edition 1806 (Catalogue A232). For the passage describing the quincunx method of survey, dated 7/13 October 1806, see pages 27-32. This section is the only addition to the text copied from *Practical Navigation* [1790], pp. 51-98.

¹⁶ The text of 'Form of the Journals' and its accompanying examples of journal forms were copied from the leaflet *The East-India Company having thought proper to employ me ...* 1779 (Catalogue A60; see note 20 below).

¹⁷ Catalogue B22 710000g Surveying diagrams 1-7, B23 710000h Surveying diagrams 8-15, B445 850117 Signal flags, B1090 080202a Surveying diagrams II, and B1091 080202b Surveying diagrams III. The text copied from pp. 51-98 of *Practical Navigation* 1798 preserved the side notes unchanged. This necessitated a sheet of errata in the 1808 issue, for which see Dalrymple to Beaufort, 29 January 1808 (San Marino: Huntington Library: Beaufort Papers): '... having detected an unaccountable Blunder in the references to the Plates concerning Nautical Surveying I found it necessary to print an Errata'.

¹⁸ For a discussion of Dalrymple's acquaintance with John Arnold, see Andrew S. Cook, 'Alexander Dalrymple and John Arnold: Chronometers and the Representation of Longitude on East India Company Charts', *Vistas in Astronomy* 28, pp. 189-195, particularly p. 190.

¹⁹ *A Comparison of the several Tracks of the Company's Ships ... 1778* (Catalogue A54). For the development of Dalrymple's ideas in 1778 and 1779, for using chronometers both to improve the accuracy of recording ships' tracks and to improve a coastal chart series, see chapter 3, pp. 86-89, and chapter 4, pp. 109-111 above.

²⁰ *The East-India Company having thought proper to employ me ... 1779* (Catalogue A60).

²¹ Beaufort adopted the wind scale without change in his own journal when he found a copy of Dalrymple's 1779 leaflet in the set of publications Dalrymple presented to him in November 1805 (Washington, D.C., Library of Congress: G1059.D23 Text 4(5)). H. T. Fry, 'The Emergence of the Beaufort Scale', *The Mariner's Mirror* 53 (1967), pp. 311-313, and 54 (1968), p. 412, opened the question of the origin of Beaufort's wind scale, but, without having seen a copy of *The East-India Company having thought proper to employ me ... 1779*, he was reliant on the anecdotal account in Dalrymple's will (PRO: PROB.10/3854, para. 37). Fry did not cite the list of wind strengths in Beaufort's manuscript journal of 13 January 1806, though it was theoretically available to him as an illustration in K. St. B. Collins, 'Admiral Sir Francis Beaufort', *Journal of the Institute of Navigation* 11 (1958), pp. 266-281, particularly p. 268. Alfred Friendly, *Beaufort of the Admiralty: The Life of Sir Francis Beaufort 1774-1857* (London, 1977), p. 143n, asserted that 'There is convincing evidence to indicate that it was Dalrymple who suggested to Beaufort the idea of adapting an earlier wind scale by John Smeaton to maritime needs', without adducing specific 'evidence'. Konvitz has since re-stated Fry's position, adding his 'discovery' of a copy of Dalrymple's 1779 leaflet in the Archives Nationales in Paris (Josef Konvitz, 'Alexander Dalrymple's Wind Scale for Mariners', *The Mariner's Mirror* 69 (1983), pp. 91-93). Konvitz had not noticed copies of the same leaflet in the Beaufort collection in the Library of Congress, in the British Library, and in Stockholm University Library; in this unsatisfactory piece of research he was also unaware of the copies of the proofs of *Practical Navigation* [1790] in public collections (see note 9 above). For a summary of the present state of knowledge, see Andrew S. Cook, 'Alexander Dalrymple's appointment as East India Company hydrographer in 1779 and his 'Instructions to Captains' for a new system of chart compilation', *XIIIth International Conference on the History of Cartography: Abstracts* (Amsterdam, 1989), pp. 52-54.

²² *Practical Navigation* [1790], chapter 2, p. 41 (para. 71).

²³ Examples of the engraved journal forms are so far known to survive only with the copies of the 1779 leaflet in the Archives Nationales in Paris and in Stockholm University Library. These forms were re-set typographically in *Essay on Nautical Surveying* 1771, Fourth edition 1806.

²⁴ *Some Notes useful to those who have Chronometers at Sea* [1780] (Catalogue A64).

²⁵ *Instructions concerning the Chronometers ... sent to Bombay* 1786 (Catalogue A112).

²⁶ *It is well known that the Sun must come to the Meridien ... 1787* (Catalogue A148).

²⁷ *Instructions concerning Arnold's Chronometers* 1788 (Catalogue

A153). Pages 1-2 were copied from *Instructions ...* 1786; on pages 3-8, paras. 1-9 and 16-40 were taken from *Some Notes useful ...* [1780] and paras. 10-15 from *It is well known ...* 1787; pages 9-12 were copied from *Some notes useful ...* [1780]. The single known examples of each of the four settings so far identified are in the following libraries (not necessarily in chronological order): London, Institution of Civil Engineers; London, Guildhall Library; Edinburgh, National Library of Scotland; and Cambridge, University Library.

28 *Some Notes useful to those who have Chronometers at Sea* [1780], p. 1n. According to Dalrymple he devised the name 'chronometer' in discussion with Joseph Banks.

29 *An Account ... of The Going of a Pocket Chronometer* 1780 (Catalogue A63). For the attribution of these prefatory pages to Dalrymple, see Cook, 'Alexander Dalrymple and John Arnold', pp. 191-192.

30 *A Letter from M. Christian Mayer* 1781 (Catalogue A71); *An Answer from John Arnold to an Anonymous Letter on the Longitude* 1782 (Catalogue A77); *Certificates and Circumstances relative to the Going of Mr. Arnold's Chronometers* 1791 (Catalogue A179); *Longitude. A Full Answer to the Advertisement concerning Mr. Earnshaw's Timekeeper* 1806 (Catalogue A226).

CHAPTER 9

'EDITOR OF ORIENTAL INFORMATION':*

THE PUBLICATION OF *ORIENTAL REPERTORY* 1790-1808

Between April 1791 and 1797 Dalrymple published 1100 quarto pages and more than thirty plates, in eight numbers of his *Oriental Repertory*, on the history, geography and ethnography of the East Indies. His editorial activity in searching out and publishing contributions was a private interest, in addition to his work for the East India Company and later also for the Admiralty. In November 1790 Dalrymple issued his prospectus¹ for a new publishing venture, removed in style and content from his nautical publications but akin to the antiquarianism of his geographical works. He proposed an occasional publication in parts, cumulating in volumes for the subscriber's library, each with a variety of short communications illustrated by topographical plates. He saw a place, among the scientific and antiquarian journals and 'gentlemen's magazines' of England and India, for such a vehicle on oriental matters. *Asiatick Miscellany* (1785-1788) and *Asiatick Researches* (1788 onwards) were fresh on the scene, the latter for more substantial articles as the organ of the Asiatic Society of Bengal.² At the age of 53, Dalrymple was established in London as East India Company hydrographer, and, in the company of Sir Joseph Banks and William Marsden, at the centre of a London network of those intellectually curious about the East Indies. From these, East India Company servants and others, he hoped to derive his material.

As first proposed, the *Plan* envisaged groups of separate tracts on 'the Geography, Commerce, History, and Manners of the Eastern Parts'.

Dalrymple claimed to have drawn up 'a scheme for such an occasional

Publication' some years before, and now extended it to 'every thing, not Nautical, that can promote the Publick Knowledge of the East'.³

The *Plan*, and the advance 'Introduction' which accompanied it as a prospectus after January 1791, crystallised in the first number of *Oriental Repertory* in April of that year.⁴ Astronomical observations were admitted, linked to 'Geography'. 'Meteorology, or account of Weather and Seasons' appeared as a separate category. 'Commerce' was expanded to 'Commerce and Manufactures'. 'Manners' was three times amplified, culminating as 'Of the Indians, comprehending their Literature, Sciences, Arts, Manners, Customs and Religion'. Natural history was first grouped with History, but later placed alone, beside 'Miscellaneous, as History, &c.'. A series of geographical headings supplemented the six subject divisions for countries outside India. The examples Dalrymple gave for geographical headings reflected, not unnaturally, his own interests: 'Ava and Pegu, Cochin-China, China, Oriental-Polynesia, &c.'⁵ From the beginning he intended to devote his contributions to the documents he had collected on south-east Asia, particularly in the Madras records between 1757 and 1759, when he was already searching for background information for his Sulu Islands trading project,⁶ and documents on embassies to Burma and Indo-China.

Dalrymple's earlier idea for the publication of a series of tracts had foundered, in his mind, on the general discredit into which subscription publication had fallen. He plainly disliked being answerable to subscribers for the management of a publishing fund created out of their subscriptions. Dalrymple had used the subscription system before, in publishing *A Collection of Plans of Ports in the East Indies* in 1774 and 1775,⁷ but the East India Company had then furnished 100 of 110 subscriptions. His answer for the *Oriental Repertory* was to have the East India Company contribute the initial publishing fund of £200, and

subscribe for 100 copies of each number at a sum equivalent to the prime cost of the whole print run of 250 copies. This would preserve the fund intact, and leave, after 50 presentation copies for contributors, 100 copies for individual private subscribers. Any such private subscriptions would be peripheral to the main operation of the fund, providing capital for engraving 'Views of many remarkable Buildings and places in India' for future volumes.⁸ For the early numbers Dalrymple proposed printing 250 extra copies, bearing the extra paper costs and press time himself.⁹ The typesetting and press make-ready formed part of the prime cost charged to the East India Company, but it is not clear how the cost of engraving and printing illustrations would be met. The implication of Dalrymple's first *Plan* is that the Company would pay, but when, after four numbers, Dalrymple appeared to make the production of future plates dependent on the fund increasing, this did not seem to be simply a question of cash flow.

The proposed format of *Oriental Repertory* was quarto, similar to *Asiatic Researches*, *Archaeologia* and *Philosophical Transactions*,¹⁰ using George Bigg, printer of Dalrymple's nautical memoirs, and William Harrison, the copperplate engraver most often employed by Dalrymple for nautical charts and plans. Dalrymple at first proposed that each number should consist of discrete tracts, each capable of being offprinted to sell 'at an advanced price'.¹¹ Each tract would therefore be paged separately, and subscribers to the whole number would need a table of contents confirming the overall pagination.

The first introduction proposed a complex system of pagination to allow subscribers to bind their collections of tracts according to the proposed subject classes. The bottom inner corner of each page would show the running title of the class, the bottom outer corner the separate paging of each tract. This was in addition to the alphabetical

register ('the literal numeration of the whole collection') at bottom centre, and the general paging of the volume at top centre. While each tract in the main classes was to have its own subsidiary paging, a single sequence of subsidiary page numbers was to run through the volume for 'Miscellaneous', which were not intended to be sold as separate tracts.¹² Changes were made in the second version of the introduction, which shows disconnected examples of The class running title and class page numbering above the inner margin in the running title line.¹³ The final version of the introduction quietly dropped all idea of the separate sale of individual tracts, and moved the class title and numbering to a subsidiary position in the left margin of each page.¹⁴ No example is known of any part of *Oriental Repertory* rebound by classes.¹⁵

During the five months before the first number in April 1791 Dalrymple had obtained the Company's backing with a starting fund of £200, and a promise (as he thought) to pay the prime cost of the whole run in return for 100 copies.¹⁶ He set up a separate distribution and accounting system for *Oriental Repertory*, apart from sales of his nautical publications and of his political and geographical works.¹⁷ The latter had been held since 1775 by the firm of John Nourse (operated in the 1780s for Charles Nourse by Francis Wingrave), who accounted for them annually.¹⁸ Dalrymple's new publications in the 1780s usually gave some combination of Charles Nourse (later with Wingrave's name added), Peter Elmsly, John Sewell and John Stockdale as booksellers. *Oriental Repertory* fell into neither of these categories: 'Printed by George Bigg, and delivered by Mr. Elmsly, opposite Southampton-Street, Strand, and by Mr. Chapman, at the East-India-House.' Elmsly had been connected with Dalrymple since the 1770s,¹⁹ but Chapman, as an longstanding Company servant, an attendant at East India House,²⁰ was not otherwise connected with the book-trade. With

the third number Aaron Arrowsmith was added to the list. A printseller rather than a bookseller, Arrowsmith was connected with Dalrymple more in map compilation interests than by ties of commerce.²¹

Had the first number of *Oriental Repertory* been marketed as originally envisaged, there would have been only two substantial separate tracts of more than eight pages in the 96 pages issued. Even running a press with half-sheets necessitates straight multiples of four pages to achieve coherent separate tracts, without loose leaves from split half-sheets to bind in. This is not clearly the case, even with the two main tracts. The first, on pages 1-30, was an article constructed by Dalrymple out of a correspondence with Andrew Ross at Madras between 1787 and 1791 enclosing letters from the naturalist William Roxburgh on the growing of pepper at Rajahmundry. The second, on pages 65-94, was from Dalrymple's own collection, a transcript of Bowyear's instructions and journal for his embassy to Cochin China in 1695-97. Otherwise the two most contributions were Roxburgh's botanical description of the tree-indigo *Nerium Tinctorium* with an engraving (communicated by the East India Company), and a pair of papers on routes in southern India, one by the young Colin Mackenzie, with three plates (communicated by Major Maule). Dalrymple included Roxburgh's discovery to demonstrate *Oriental Repertory* as all embracing, though he would 'not often be induced to meddle with Botanical Subjects'.²²

By contrast the second number, though longer at 160 pages, contained, besides a plan of Seringapatam,²³ only three short pieces less than thirty years old. Dalrymple himself contributed 36 pages, mostly in the form of a letter, setting down the result of his researches in Madras in 1759 into the earlier Negrals settlements. He also printed 94 pages, chiefly from papers which Capt. George Baker had given him on the Cuddalore in 1759, concerning his embassy to Burma in 1755. The

third and fourth numbers (210 and 114 pages respectively) followed a similar course. Fifty-six pages of the third number were spent on papers given to Lord Pigot many years earlier by Capt. Walter Alves concerning the loss of Negrais in 1759 and Alves' embassy to Ava the following year.²⁴ Eighty pages of the fourth number were occupied by Dalrymple's own account of Sulu, which he had begun in 1763, and parts of which he had published in preliminary form in 1769 and 1770.²⁵

On any basis of assessment, though each number contained items of current or lasting interest, there was a heavy emphasis on papers by Dalrymple or from his collection, on papers recording historical events pre-dating the end of Dalrymple's own service in the East in 1765, and on papers on areas of Dalrymple's personal interest (Burma, Malaya, Indo-China, China and Sulu). From the introductions, one can discern those contributors with whom he had a special connection, and distinguish them from the 'cold' contributions he canvassed publicly. Claud Russell,²⁶ Thomas Fitzhugh,²⁷ John Clements²⁸ and James Rennell²⁹ were in the former category; Lt. Ewart, Maj. Maule, and Mr. Gregory 'of Berner Street' in the latter. Andrew Ross, Dalrymple's correspondent in Madras,³⁰ and Roxburgh were to join the first list as the second volume progressed.

Dalrymple following his stated policy of adding topographical engravings to each number, but not all the plates were connected with text. The Seringapatam plan in the second number, the only one to be advertised for separate sale, came from Governor Hornby's collection in Bombay, received by Dalrymple in 1784 and used by him both for *Oriental Repertory* and his nautical series; the plate of views of buildings in Seringapatam, from the same source, appeared in the third number.³¹ The Hosur plate was announced in advance on grounds of topicality,³² but the Cannanore plan had no introduction. Dalrymple had the Burmese

original of the Prince of Persaim's letter from the Alves embassy, and contemplated publishing 'A fac simile Engraving of it, if the Fund should, hereafter, admit'.³³ It was the failure of the fund to increase during the first volume which depressed Dalrymple's hopes to 'have given in this Work, Views of many remarkable Buildings and of Places in India'.³⁴

Throughout the first volume Dalrymple maintained a six-monthly frequency of issues. Each number was issued with a blue-paper cover printed with a table of contents, and indexes of persons, places and things. These covers were designed to be discarded by the binder on completion of the volume with full contents tables and indexes.³⁵ The idea of a series of substantial tracts had been diluted by a larger number of small contributions, some no more than letters. Despite grouping letters into edited narratives, for example on pepper, Dalrymple could not avoid the impression of uncritical antiquarianism. The first volume did not develop a coherence other than around Dalrymple as editor and commentator, and it could not be said to have reached the critical momentum necessary for a serial publication to escape the gravitational pull of a dominant single progenitor.

Dalrymple said as much in his introduction to the first volume, though his immediate reason was more practical: 'It depends on the sale of this volume, whether the Fund will be competent to publish another.'³⁶ The publishing fund had diminished, where he had expected that private subscriptions over and above the Company's one hundred would cause it to increase. The Company's role was subscriber, not sponsor, buying *pro rata* only 64 copies of each number.³⁷ At the time of the second issue Dalrymple wrote to the Chairman and Deputy 'in hopes The Company would have taken the whole 100 copies of which they had an option that there might be a certainty of the Fund increasing'.³⁸

The first three numbers of the second volume, appearing at six-monthly intervals between February 1794 and February 1795, followed superficially the form of the first volume. William Marsden and William Pigou (son of the former Director, Frederick Pigou) became frequent contributors. In the first number (168 pages) Andrew Ross provided correspondence (with enclosures) on schemes for irrigating a large area of the Circars,³⁹ and Dalrymple drew from his own archives an account of Mauritius, Réunion and Madagascar written in 1756 by C.F. Noble⁴⁰ for presentation to Pigot. These were the largest contributions, 66 and 46 pages respectively, and Dalrymple issued them also as separate publications in 1793 while preparing this number.⁴¹ Truly new material, such as Lt. John Comyn's 1793 letter describing territories on the Malabar Coast, accounted for very little space.

The second and third numbers reflected an increasing antiquarianism: extracts from East India Company records on Fleetwood's embassy to Ava in 1695 and accounts copied from Orme's manuscript collections. The central feature of the third number was a new translation by Charles Wilkins of the story of Dooshwanta and Sakoontala from the Mahabharata. Dalrymple appended to this an extract 'On Transmigration and Final Beatitude' from Sir William Jones' edition of the Institutes of Manu.⁴² He published the two texts together as separate quarto early in 1795, and was persuaded by Wingrave that there was a demand also for a pocket edition, which appeared in May.⁴³

In 1794 and 1795 *Oriental Repertory* became a forum more personal to Dalrymple, and to his interests and comments, though he was far removed in time from even his last period of service in Madras in 1775-76. He used the ephemeral coloured cover sheets, after lists of contents, for notices and requests to subscribers,⁴⁴ recommending them to augment their copies with some of his nautical plans. To illustrate

John Jesse's account of Brunei in the first 1794 number he suggested Kirton's plan of Brunei (published in 1787) and another of Brunei and Labuan issued in 1779.⁴⁵ A group of five plans of Mauritius and Réunion in the nautical series were offered to illustrate Noble's account.⁴⁶ More important, he began a search for lost manuscript accounts of India and south-east Asia. He was still pursuing a volume of drawings of inhabitants of the Mentawai Islands, off the west coast of Sumatra, which he had last seen before 1774 'in the hands of Osborne the Bookseller', and he gave a list of manuscripts or groups of papers which he wished to see again, almost exclusively concerning Borneo, China and south-east Asia.⁴⁷

Dalrymple was becoming increasingly sure of himself in what to include in *Oriental Repertory*, and in what form. He included the long correspondence on irrigation against the advice of friends, but proceeded with Orme's support. Orme was already ill at the time he loaned Dalrymple the unpublished Colar plate in 1791, but his influence on Dalrymple was supportive and reassuring. Genuinely hesitant about the value of some of his offerings in 1791 and 1792, Dalrymple went ahead with the publication of 'On Watering the Circars' and Noble's account of Mauritius as separate tracts in 1793, the first with Orme's backing,⁴⁸ before including them in *Oriental Repertory*. Besides allowing the use of at least one other plate,⁴⁹ Orme opened to Dalrymple his collection of manuscripts, assembled for the intended further volumes of *Military Transactions*,⁵⁰ in a letter to Dalrymple of 1 April 1794, explaining the arrangement of his collection and its system of indexes.⁵¹ Dalrymple immediately derived two substantial accounts⁵² for the second number in 1794, and would have used more had there not been a gap in publication after February 1795.⁵³

Dalrymple intended to finish the second volume in 1795: a map from Rennell, of Burma from Chittagong to Martaban, was to be engraved 'in the next Number, which will compleat Vol. II'.⁵⁴ He was upset in his plans, first by the emigration of William Harrison to Philadelphia, under contract as a banknote engraver, and by Bigg's departure from the scene in 1795, either from ill-health or retirement.⁵⁵ After a gap of two years came a half-price, half-size number of ninety-two pages and one plate, printed by Edward Cox in 1797. Cox, who had been in partnership with Bigg before 1776, was the East India Company's printer at this time,⁵⁶ and the same distribution system was employed as before. The introduction indicated that accounts yet to be published, Heyne's account of diamond mines and Andrews' embassy to Candia, would appear 'in Volume 3' or 'in the next Volume', rather than in a further number of volume II; The proposed account of sugar manufacture in Bengal was promised simply for 'a future Number of this Work'.⁵⁷ On the cover of the fourth number is the only promise of future activity: 'No. 5 with the Index which compleats Vol. II will speedily be published.'

From surviving copies it seems that most subscribers stayed with the venture until 1797. Many sets are found with the four numbers of the second volume to 1797 bound together, sometimes with the coloured covers retained to serve as a list of contents,⁵⁸ though some subscribers gave up after 1795, sending the first three numbers to their binder.⁵⁹

There was no speedy conclusion to the second volume. Eleven more years elapsed before Dalrymple turned again to *Oriental Repertory*, in the last year of his life, to complete the second volume by a series of expedients. Instead of issuing the promised full fifth part to complete volume II, he prepared an extremely short substitute: twenty-four pages of new text, with indexes, tables of contents, and a volume title-page for

surviving subscribers to match the 1793 title to volume I.⁶⁰ According to the title page ('Volume II in five parts') this was the fifth part, but in the table of contents it was subsumed as the conclusion of the half-size fourth number begun in 1797. The symmetry of four 'numbers' in each volume was therefore maintained everywhere except on the subscribers' title-page. The printer was William Ballintine, then in partnership with John Law.⁶¹ Like Cox, Ballintine followed Bigg's format, but his standard fount of body type was also clearly different.

As well as printing the subscribers' title-page to volume II, Ballintine and Law produced a volume title-page, also dated 1808, for the sale of copies of volume II prepared as a complete volume.⁶² The partnership took over the stocks of sheets (or stitched numbers) for earlier parts of volume II. Elmsly had long since died, and neither Chapman nor Arrowsmith appear in connection with the 1808 completion. Dalrymple had put the sheets of one of his uncompleted nautical memoirs into Ballintine's hands for completion in 1806,⁶³ and it is reasonable to suggest that *Oriental Repertory* may have been treated similarly. The first volume of *Oriental Repertory*, completed in 1793, was also given a fresh title-page dated 1808, with the imprint of William Ballintine alone.⁶⁴ It is unlikely to have been a post-dated imprint from before the Ballintine & Law partnership, and unlikely to have been a single exercise outside the partnership in 1808. Possibly the stocks of volume I were acquired by Ballintine, sewn but not bound, and were re-packaged by him, after the dissolution of his partnership with Law, to match volume II for new purchasers.

The contents of the so-called fifth number of volume II were a curious mixture. A short article by Roxburgh on Chanda was accompanied by a new map engraved by Isaac Palmer, Dalrymple's new engraver, in 1797. The Bednore and Anandapuram plans, promised in 1792 and engraved in

1795, were finally issued, together with a small-scale chart of northern Borneo which connected only with Dalrymple's account of Sulu in volume I. The only contribution of substance was a compilation begun some years earlier by Dalrymple on the settlement of Prince of Wales Island. Focussing on letters from Francis Light to Andrew Ross in the late 1780s, he related the early history of Light's settlement, and added a paper from Banks of August 1803 and additional information from Penang and from Calcutta journals of 1805 and 1806.

No editorial statement appeared on the completion of volume II to indicate Dalrymple's sense of his own achievement. The value of *Oriental Repertory*, apart from its content, is to indicate the subjects and areas of interest uppermost in Dalrymple's mind at different times as unfinished business. His pamphlet *Observations on the Copper Coinage wanted for the Circars* in 1794 was a direct by-product of his correspondence with Roxburgh over contributions for *Oriental Repertory*.⁶⁵ In the introduction to the third number of volume I, Dalrymple suggested supplying a copper coinage from England for Masulipatam, and the Directors requested him to publish his scheme.⁶⁶ Dalrymple's fragmentary *Memoir of a Chart of the South Coast of Pegu* coincided in 1791 with the compilation of his narrative of the embassies to Burma in the 1750s.⁶⁷ In late 1793 and 1794 Dalrymple was concentrating on Mauritius and Réunion, and published separately six plans, Noble's account from *Oriental Repertory*, and *Collection of Papers on the Navigation, Winds and Weather at the French Islands Mauritius and Bourbon*.⁶⁸ The account of Penang in the last part-number, particularly the information gathered by Dalrymple after receiving Sir Joseph Banks' contribution in 1803, is contemporary with *Memoir of a Chart of the Passages at the Southern Extremity of Asia* 1805, the sixteen charts discussed there, and the engraving of Archibald Blair's two plans of Prince of Wales Island.⁶⁹

As with all Dalrymple's publications, *Oriental Repertory* was intensely personal to its editor. Few contributions were published unembellished with footnotes over the 'AD' logograph: those that escaped were marginal to Dalrymple's current interests. But *Oriental Repertory* was intended as a vehicle for contributions somewhere between *Archaeologia* and *Asiatick Researches*. His relations with the octavo magazines are less clear. *The Calcutta Magazine* re-published his *Plan* and introduction in November 1791,⁷⁰ but by then likely contributors in India, such as Andrew Ross and William Roxburgh, were already in contact with him. He did not wish *Oriental Repertory* to become a review magazine, but he printed the account 'Inundation of the Country along the Bay of Coringah', both separately and in *Oriental Repertory* even after sending it first to *The European Magazine*.⁷¹ Despite the frequency of his editorial contributions, there is no indication that Dalrymple intended to dominate his contributors. His way of understanding a subject was by analysing or recording it, and re-presenting it with his own gloss. Few were likely to subscribe or to contribute to *Oriental Repertory* other than from personal knowledge of Dalrymple, but such a group was already an elite and influential body. His own writing was not negligible: part of his 'Account of Sooloo', which he used in *Oriental Repertory* in 1792, was reprinted in *The Asiatic Annual Register* in 1806.⁷² But as a serial publication *Oriental Repertory* never ceased to be Dalrymple's brainchild: its appearance depended on the time and inclination he had for it, and it was never intended to outlive him as 'Editor of Oriental Information'.

NOTES TO CHAPTER 9: 'EDITOR OF ORIENTAL INFORMATION'

* 'The Publication of every thing personal is disclaimed, unless where redounding to the honour of any one: and I am determined to avoid every thing that may bear the most distant reference to any party: The Task proposed is not that of an Historian; it is only meant to be Editor of Oriental Information.' (*A Plan for the Publication of a Repertory of Oriental Information* 1790, p. 4).

¹ *A Plan for the Publication of a Repertory of Oriental Information* 1790 (see Catalogue A176).

² J. D. Pearson, *Oriental and Asian Bibliography* (London, 1966), p. 104.

³ *A Plan for the Publication ...*, first issue, p. 4. Nautical material was specifically excluded only in the first issue of the *Plan* (see Catalogue A176). The publication of nautical memoirs was part of the responsibility for which Dalrymple was retained by the East India Company separately at £500 a year.

⁴ After the Court of Directors' approval of the *Plan* in its first form, it was circulated with an additional four-page 'Introduction' (see Catalogue A176). The 'Introduction' was subsequently twice revised and, in its final form, paired with a revised *Plan* in subscribers' copies of the first number of *Oriental Repertory* (see Catalogue A178). Dalrymple's planning of the enterprise developed in consultation with Banks, Marsden and others: copies of the early forms of the *Plan* and 'Introduction' are known to survive only in the collections of Sir Joseph Banks (BL: 454.g.6.) and William Marsden (SOAS: ED.78.2(27). 7172).

⁵ 'Introduction' [to *Oriental Repertory*, dated 13 January 1791], second and third issues, p. 1.

⁶ See above, chapter 1, pp. 18-19. Dalrymple's own contributions to *Oriental Repertory* are confirmation of the work represented by his autobiographical statements that he had 'carefully perused the Company's Records at Madrass' (*Memorial of Alexander Dalrymple* 1768, p. 2; *Memorial of Alexander Dalrymple* 1791, p. 5; 'Memoirs of Alexander Dalrymple, Esq.', *The European Magazine and London Review* (November 1802), p. 327).

⁷ *Proposals for Engraving by Subscription sundry Plans of Ports &c. in the East Indies* 1773 (see Catalogue A28).

⁸ 'Introduction to the First Volume of the Oriental Repertory' [dated 31 December 1792 and issued with the fourth number of *Oriental Repertory*], pp. ii-iii.

⁹ Presswork, at least for this type of material, was conventionally costed in units of 250 copies (*Collection of Nautical Memoirs and Journals* 1806, pp. i-ii: '... the Charge is the same, after the Press is set up, for printing 100 copies, as for printing 250; Printers always charging, for Press-work, 250 in the first instance; and then for any greater number by 250; i.e. 500, 750, 1000 and so on, always reckoning the additional Press-work by 250: The additional Press-work bearing a very small proportion to the Setting up the Press.'). See also India Office Records [IOR]: E/1/114, p. 67 (Miscellaneous Letters Received 1806: Dalrymple to Court of Directors 10 September 1806: '... printers, after

the Press is set up, are only paid for working them off at [a] few Shillings p[er] 250.').

¹⁰ Dalrymple was Fellow of the Society of Antiquaries and of the Royal Society. (Joan Evans, *A History of the Society of Antiquaries* (Oxford, 1956), p. 155n, refers to Dalrymple as a Fellow, but wrongly identifies him as the writer of a letter on the subject of the ruined state of Scottish abbeys and cathedrals who subscribed himself 'D.A., North-Britain, 31st Augt. 1776', and whose failure to frank the letter incurred for the Society a postage charge of 5s.9d. Dalrymple was in Madras at this time, in the busy period between Lord Pigot's arrest and his own hasty departure as emissary to London.)

¹¹ *Plan for the Publication ...*, first issue, p. 4; 'Introduction' [to *Oriental Repertory*, dated 13 January 1791], first issue, pp. 2-3.

¹² 'Introduction' [to *Oriental Repertory*, dated 13 January 1791], first issue, p. 2.

¹³ 'Introduction' [to *Oriental Repertory*, dated 13 January 1791], second issue, pp. 2-3.

¹⁴ 'Introduction' [to *Oriental Repertory*, dated 13 January 1791], third issue, p. 2.

¹⁵ Except in one instance of quasi-facsimile republication of the 'Ava and Pegu' class pages, by the Government of Burma in 1926: *Reprint from Dalrymple's Oriental Repertory, 1791-7 of portions relating to Burma* (Rangoon, 1926). The binding instructions for plates in completed volumes presupposed straight volume binding by numbers.

¹⁶ East India Company, Court Minutes, 1 December 1790 (IOR: B/112, p. 655), and 31 December 1790 (IOR: B/112, pp. 721-22): 'Order'd ... That Mr. Alexander Dalrymple be advanced the sum of £200 for carrying on the Repertory and to account.' The warrant for payment was issued on 5 January 1791 (East India Company, Court Minutes (IOR: B/112, p. 745)). Only one director of the 1790-91 year can be identified as having a connection with Dalrymple: Thomas Fitzhugh, previously a supercargo at Canton, and later a contributor himself to the *Oriental Repertory*. Thomas Fitzhugh's private collection of Dalrymple's nautical memoirs, now in the American Geographical Society's collections in Milwaukee, includes a much-altered printer's proof of Dalrymple's *Memoir of a Chart of the Indian Ocean 1787* (see Catalogue A123).

¹⁷ When he notified Stockdale to cease selling his publications on the introduction of income tax in January 1799, he specified that 'This Notification has no relation to the Oriental Repertory the Sale of which not being on my account, but on account of that Fund, may be sold as usual.' (Dalrymple to Stockdale, 14 January 1799 (Laing Manuscripts (Edinburgh University Library [EUL]: La.11.589/2)).

¹⁸ For the inventory of copies of Dalrymple's publications kept by the firm of John Nourse between 1775 and 1794, see: London, Royal Astronomical Society: Add. MS. 5.13-15 (Miscellaneous papers of John Nourse). John Nourse's brother Charles, a surgeon at Oxford and knighted in 1786, had inherited the firm on the former's death on 24 April 1780. The business was carried on in his name by Francis Wingrave during the 1780s. Charles Nourse died on 19 April 1789, and bequeathed the business to Wingrave, who remained in the same premises until his death on 6 February 1820 (John Nichols, *Literary Anecdotes*

of the Eighteenth Century (London, 1812-16), vol. iii, pp. 732-33; John Nichols, *Illustrations of the Literary History of the Eighteenth Century* (London, 1817-58), vol. viii, p. 492; Ian Maxted, *The London Book Trades, 1775-1800* (Folkestone, 1977), s.n. Wingrave). Nichols' date for Wingrave's death is to be preferred to Maxted's date of 1823 from Post Office directories.

¹⁹ Elmsly had handled the English sales of D'Après de Manneville's *Le Neptune Oriental* at Dalrymple's instigation (see Paris, Archives Nationales [AN]: Marine 3JJ 341(10) for correspondence of 1773 between Dalrymple and D'Après de Manneville, including drafts of two letters from D'Après to Elmsly). Dalrymple was referring to 'Mr. Elmsly my bookseller' as early as 1772 (AN: Marine 3JJ 340(7) (Dalrymple to D'Après de Manneville, 10 November 1772)).

²⁰ 'Robt. Chapman: Appointed to attend the Lobby of the Secretary's Office' (IOR: L/AG/9/4/13: East India Company Home Establishment Quarterly Salary Warrants 1760-1809). Chapman was appointed by order of the Court of Directors on 4 October 1769, and last appears in the quarterly list for March 1798. Chapman was plainly a 'useful person to know': see Nichols, *Literary Anecdotes*, vol. vi, p. 638: '... unless you would be kind enough to forward a copy or two yourself; which might easily be done by delivering them in a packet sealed up to Mr. Chapman, head messenger at the India House, who, as from his dispatching all the packets he has frequent opportunities, will take care to send them by the first conveyance' (George Perry, Calcutta, to Nichols, 1 October 1783).

²¹ Arrowsmith dedicated his 1794 world map to Dalrymple, including an engraved portrait (Map of the World on a Globular Projection, exhibiting Particularly the Nautical Researches of Capt. James Cook, F.R.S. with all the Recent Discoveries to the Present Time, carefully Drawn by A. Arrowsmith (London, 1794): 'This Map is Respectfully Dedicated to Alexander Dalrymple Esqr. F.R.S. in Testimony of his many New and Valuable Geographical Communications To His most obedient and very Humble Servant A. Arrowsmith.'). In *A Companion to a Map of the World* (London, 1794), pp. 18-19, Arrowsmith acknowledged Dalrymple's assistance: 'My thanks are particularly due to ... Alexander Dalrymple, Esq. F.R.S. ... who generously presented me the whole of his valuable geographical publications, consisting of 632 Maps, Charts, Plans, &c. accompanied with near 2,000 pages of letter-press, with the use of several MSS; whence I have been enabled to ascertain many doubtful positions.' Arrowsmith's *A Companion to a Map of the World* was among the non-Dalrymple works printed by George Bigg (see chapter 7, pp. 229-230). Arrowsmith served as Dalrymple's assistant in the Admiralty for a short time in 1795 and 1796 (see chapter 5, pp. 161-162, and R.T. Gould, 'A History of the Hydrographic Department of the Admiralty', unpublished typescript, chapter I, p. 11 (Cambridge, Scott Polar Research Institute: 061.1)). For another copy, see: Taunton, Hydrographic Office: Sailing Directions Branch, Incoming Letters, Miscellaneous File 4 (Parry Papers I, 1804-1923). The presence of Arrowsmith in the list of agents delivering *Oriental Repertory* in 1792, at his 5 Charles Street, Soho Square, address, suggests that Gould is mistaken to state that Arrowsmith set up his business only leaving Hydrographic Office employ. Maxted, *The London Book Trades, 1775-1800*, records Arrowsmith as active in trade in 1790, but the *Oriental Repertory* evidence advances Maxted's information of

Arrowsmith's earliest known use of the Charles Street premises from 1798 to 1792. R.V. Tooley, *Tooley's Dictionary of Mapmakers* (Tring, 1979), s.n. Arrowsmith, dates Arrowsmith's move to Charles Street no earlier than 1794.

²² *Oriental Repertory*, volume I, number 1, 1791, introduction, p. 11.

²³ Catalogue B680 911027 Sirengampatanne. Alone of the plans and illustrations in *Oriental Repertory*, this was offered simultaneously for sale separately, at 1s.6d. (*Oriental Repertory*, volume I, number 2, front cover).

²⁴ For the closeness of the connection between Dalrymple and the Pigot family, both before and after Lord Pigot's death in detention in Madras in 1777, see chapter 1 above. Dalrymple made considerable use of material received from Alves in his nautical publications, e.g. *Appendix to Capt. Ritchie's Survey of the Bay of Bengal* 1785 (Catalogue A132), and Catalogue B25 710000j China/Mendoça and B54 740205q Tavay River.

²⁵ *A Plan for Extending the Commerce of this Kingdom* 1769; 'Account of some Natural Curiosities at Sooloo', in *An Historical Collection of the Several Voyages and Discoveries in the South Pacific Ocean*, volume I 1769/1770, pp. 1-21.

²⁶ Claud Russell served with Dalrymple at Madras in 1775-76, going out in the *Grenville* with Pigot and Dalrymple in 1775. He contributed information to Dalrymple's nautical publications, e.g. Catalogue B521 870227 Gulph of Persia/Kempfer and B523 870330 Gulph of Persia/Russell. Dalrymple designated Russell his representative in Madras for assembling and shipping his books and papers to London in 1779 (East India Company, General Correspondence, Despatch to Madras, 23 December 1778 (IOR: E/4/868, pp. 287-288)). Russell had married Leonora, daughter of Lord Pigot, in Madras, and, on their return to England, Dalrymple remained a close friend and visitor at Russell's home at Binfield Manor, Bracknell, Berkshire (see Dalrymple to Marsden, 17 June 1798, written from Binfield Manor (PRO: ADM.1/3522)).

²⁷ See note 19 above.

²⁸ Clements, an East India Company commander, provided chart material for Dalrymple (see for example Catalogue B480 860227 Clements Strait). He was also nominated, with Marsden and Rennell, as an executor (Will of Alexander Dalrymple (PRO: PROB.10/3854)).

²⁹ James Rennell retired as Surveyor-General of Bengal in 1777 (Andrew S. Cook, 'Major James Rennell and *A Bengal Atlas* (1780 and 1781)', *India Office Library and Records Report for the Year 1976* (London, 1978), pp. 5-42). Rennell had been assistant to Dalrymple on the 1762-63 voyage of *London* to Borneo. It is likely that the resumé of the disorganised state of geographical records at East India House, which Rennell gave, in his 1776 application to Warren Hastings, as a reason for retiring to England (IOR: P/2/16, pp. 463-64 (Bengal Public Consultations, 5 December 1776), printed in Cook, 'Major James Rennell', p. 15), may have been supplied by Dalrymple. Rennell had no direct knowledge of the state of the records, while Dalrymple had been using them regularly in the early 1770s (see chapter 2 above).

³⁰ Andrew Ross was a prominent free merchant in Madras, having been resident there from 1752 onwards. He served as mayor in 1757, and again in 1792. He was a member of the jury at the inquest on Lord

Pigot in 1777, and had visited him in detention. By the time of his contributions to *Oriental Repertory* he was already over 70 and he died in 1797 at the age of 79 (H.D. Love, *Vestiges of Old Madras* (London, 1913), vol. iii and index, s.n. Ross).

³¹ Catalogue B680 911027 Sirengampatanne (see also note 23 above), and B703 920627a Seringapatnam views. The other plan used from Hornby's collection was Catalogue B710 920914 Ponah (issued in *Oriental Repertory*, volume 2, number 1). For Dalrymple's publication of plans from Hornby's collection in his nautical series, see chapter 4, pp. 125-126 above.

³² Catalogue B688 920125 Ossour (issued in *Oriental Repertory*, volume I, number 3). *Oriental Repertory*, volume I, number 2, front cover: 'The Plan of Oussour, which Earl Cornwallis has notified his intention of attacking, will be in the next number.'

³³ *Oriental Repertory*, volume I, number 3, introduction, p. i.

³⁴ Evidence for the costing of Dalrymple's copperplate engraving is generally insecure. The single well-documented example is his South Atlantic Ocean chart of 1769 (Catalogue B11 690400 South America), when the estimated engraving cost of the 25 x 19 inch plate was £11.19s.0d. (*Memoir of the Chart of the Southern Ocean* 1769, p. 8). Of this, £2.16s.6d. was allowed for graduated scales, not required on *Oriental Repertory* illustrations. Run-on copies of this chart, admittedly after extensive alteration, were on sale in 1789 at 4s.0d. Simple 9 x 12 inch plans of ports were sold at 6d. each at this time, and those from larger plates or with views or more complex engraving at 1s.0d. or 2s.0d. (*List of Charts, Plans of Ports, &c.* 1789). The Seringapatam plan price of 1s.6d. (see note 27 above) is in line with this, and the other illustrations in *Oriental Repertory*, volume I (with the exception of the botanical plate provided by the East India Company) would, if offered separately, likely have fallen within the 6d.-to-2s.0d. price range. The views in the Tanjore district which Dalrymple began in 1778 (780915a-780915e: see Catalogue B136-B140) were altogether more elaborate, and were offered for sale in 1789 at 2s.6d. or 5s.0d. each. If Dalrymple was intending views of this quality as illustrations, then their probable cost of production would explain his dependence on a rising subscription fund for their issue.

³⁵ Some library copies of *Oriental Repertory*, volume I, from the original fascicle issue have retained the ephemeral blue covers in which each number was issued. These are described under the bibliographical descriptions of the separate numbers (see Catalogue A178, A184 and A188). No copy of volume I, number 4, is known to survive with coloured covers: as this number was issued with the volume title-page and contents lists and indexes for the completed volume, it is likely that the ephemeral covers were unprinted.

³⁶ *Oriental Repertory*, volume I, introduction [dated 31 December 1792], p. iii.

³⁷ Dalrymple had written to the Court of Directors on 1 June 1791 'stating that if the Company think proper to take 100 Copies of the 1st Number of the *Oriental Repertory* and pay the sum of £70 or £66 to the Fund, he will rate the other Copies for sale at 12s. each' (East India Company, Court Minutes, 1 June 1791 (IOR: B/113, p. 139). The Court referred the letter to the Committee of Correspondence 'to do therein as

they shall think fit'. No report or recommendation was required to be submitted, and Dalrymple's letter does not survive in the Committee's letter books for 1791 (East India Company, Miscellaneous Letters Received, 1791 (IOR: E/1/86-87)).

³⁸ Dalrymple to Chairman and Deputy, 21 December 1791 (East India Company, Miscellaneous Letters Received, 1791 (IOR: E/1/87, p. 129). The Court decided simply 'to subscribe for the same number of Copies as they did for the former publication' (East India Company, Court Minutes, 22 December 1791 (IOR: B/114, p. 713). This was repeated when the Court paid £48 for 64 copies only of the fourth number (East India Company, Court Minutes, 12 June 1793 (IOR: B/117, p. 191).

³⁹ 'On Watering the Circars', 'Appendix to ['On Watering the Circars']', and 'Inundation of the Country along the Bay of Coringa, 1787', *Oriental Repertory*, volume 2, number 1, pp. 33-98.

⁴⁰ 'Some Remarks made at the French Islands of Mauritius and Bourbon, 1755', 'Madagascar', and 'Postscript ... containing a Sketch of the Succession of Gouverneurs', *Oriental Repertory*, volume 2, number 1, pp. 99-144. In the introduction to this number, pp. ii-iii, Dalrymple gave a short biographical account of Noble. Dalrymple seems to have been attracted by the robustness of Noble's opinions ('I knew him well, he was intelligent, but alleged to be cynical, though that did not appear in his conversation, whatever be the case in his writings'): though he omitted from *Oriental Repertory* Noble's derogatory paper *The French and English Marine Regulations Compared*, he printed it for private circulation (see Catalogue A200 and note 68 below).

⁴¹ *Memoir on Watering the Circars* 1793, and *Appendix to the Memoir on Watering the Circars* 1793 (see Catalogue A197 and A198); *Some Remarks made at Mauritius* 1793 (see Catalogue A199). In each case the *Oriental Repertory* versions were printed from the same setting of type as the separate publications, though re-paged. Evidence for the priority of separate publication of *Memoir on Watering the Circars* is contained in the text on page 67 of the *Oriental Repertory* version: the parenthesis '(referred to in Memoir Page 20)' is repeated from the *Appendix*, p. 9, where it directs attention back to *Memoir on Watering the Circars*. As 'On Watering the Circars' in *Oriental Repertory* lacks 'Memoir' in its title, it cannot have preceded the separate publication. Surviving copies of the separate publications lack the illustrations provided in *Oriental Repertory*: Catalogue B730 931017 Northern Circars, B738 940108 Golconda River, and B744 940214 River Shevery view. Though the Northern Circars map has an imprint date of 17 October 1793, Dalrymple's letter of 5 December 1793 to the Court of Directors implies that the 'Map of the Circars had not yet been engraved (East India Company, Court Minutes, 11 December 1793 (IOR: B/118, pp. 578-579)). The position is not so clear for *Some Remarks made at Mauritius*, of which examples exist with and without the unrelated 'An Account of the Island Bourbon, in 1763' which also appeared in *Oriental Repertory*, volume 2, number II, in July 1794. Surviving copies of the separate publication, in either version, lack the illustration provided in *Oriental Repertory*: Catalogue B739 940117 Hanging-Bridge illustration.

⁴² Sir William Jones (ed.), *Institutes of Hindu Law; or the Ordinances of Menu ...* (Calcutta, 1794).

⁴³ *The Story of Dooshwanta and Sakoontala* 1795, first and second

editions (see Catalogue A209-A210).

⁴⁴ Many library copies of *Oriental Repertory*, volume 2, from the original fascicle issue have retained the ephemeral pink or green covers in which each number was issued, particularly those bound as 'complete' during the long hiatus in publication after 1797 (see note 58 below). These are listed under the bibliographical descriptions of the separate numbers (see Catalogue A202, A207, A208 and A214). No copy of volume 2, number V, is known to survive with coloured covers: as this number was issued with the volume title-page and contents lists and indexes for the completed volume, it is likely that the ephemeral covers (if any) were unprinted.

⁴⁵ Catalogue B535 871105 Borneo-Proprietary, and B149 790728a Borneo.

⁴⁶ Catalogue B734 931212a Port Louis, B737 940103 Mauritius, B740 940129 Bourbon, B741 940204a Isle de France, and B743 940210 Mauritius. See also chapter 4, n. 196 above.

⁴⁷ *Oriental Repertory*, volume 2, number 1, cover. Dalrymple was already searching for the Mentawai Islands drawings in February 1774 (*Plans of Ports in the East Indies 2* 1774, introduction, p. 4).

⁴⁸ *Oriental Repertory*, volume 2, number 1, introduction, pp. 1-2. Dalrymple had first issued *Memoir on Watering the Circars* and its *Appendix* separately (see note 41 above), in part to gauge opinion about their inclusion in *Oriental Repertory*. Few of these separately issued copies are known: the Royal Geographical Society has Marsden's copy of the *Memoir*, and those in the India Office Library are from Robert Orme's collection (IOL: W 4546).

⁴⁹ Catalogue B736 931228 Ourangal. See also *Oriental Repertory*, volume 2, number 1, introduction, p. 4.

⁵⁰ Robert Orme, *History of the Military Transactions of the British Nation in Indostan from the year 1745*, 3 volumes (London, 1764-1778). Dalrymple first came to Orme's notice in Madras as Clerk to the Committee of Accounts in the 1750s. Orme was then Accountant and a Member of Council, and he allowed Dalrymple the use of his library ('Memoirs of Alexander Dalrymple, Esq.', *European Magazine* (November 1802), p. 325). This friendly relationship flourished, in spite of differences between Pigot and Orme, and resumed later in London after Orme's withdrawal from Madras early in 1758 (Love, *Vestiges of Old Madras*, vol. ii, pp. 517-519).

⁵¹ Orme to Dalrymple, 2 April 1794 (IOR: MSS. Eur. Orme Catalogue 1). This letter, presumably associated with the catalogue at the time of Dalrymple's use, fortunately remained in place through Orme's bequest of his collection to John Roberts, and the latter's presentation of it to the East India Company in 1801. The letter is printed in S.C. Hill, *Catalogue of Manuscripts in European Languages belonging to the Library of the India Office, volume II, part I: The Orme Collection* (London, 1916), p. xv. See also *Oriental Repertory*, volume 2, number 1, introduction, p. 4.

⁵² 'An Account of the Island of Bourbon in 1763' (IOR: MSS. Eur. Orme India.XVI, pp. 4512-4520; copied from a manuscript attributed to Richard Smith (IOR: MSS. Eur. Orme O.V.4, pp. 69-83)), and 'Mustepha's Journey, from Bengal to Pondicherry, 1758' (IOR: MSS. Eur. Orme O.V.6, pp. 1-29 (Letter dated Calcutta, 10th March 1761, from Mustepha to William

McGuire) and pp. 35-39 (Letter dated Calcutta, 2 January 1768, from Mustepha to Luke Scrafton, in London)), printed in *Oriental Repertory*, volume 2, number II, pp. 201-272.

⁵³ Other shorter notices which Dalrymple derived from Orme were 'Chilka Lake' (IOR: MSS. Eur. Orme India.XV, p. 4133), 'An Account of the road from Hodgegunj to Calcutta' (IOR: MSS. Eur. Orme India. XVII, p. 4745), 'Extract from a letter from Cuttack dated 15 January 1775 [concerning Chilka Lake]' (IOR: MSS. Eur. Orme O.V.71, pp. 53-58), 'Extract from a letter from Ballasore dated 22 January 1775 [concerning road from Ganjam to Balasore]' (IOR: MSS. Eur. Orme O.V.71, pp. 59-64), 'Nerher Dass Gossein Fukeer, his account of Meckley' (IOR: MSS. Eur. Orme India. XVII, pp. 4746-4749), and 'An Account of the Road from Casspoor to Meckley' (IOR: MSS. Eur. Orme India. XVII, pp. 4750-4751). These were copied from other manuscripts in Orme's collection (see Hill, *The Orme Collection*, entries at these numbers), and printed in *Oriental Repertory*, volume 2, number III, pp. 405-412 and 477-482. A number of accounts published by Dalrymple earlier from other sources can also be found in other copies on Orme's collection. For example, 'Letter to the King of Cochin-China, Mr. Bowyear's Instructions, and Mr. Bowyear's Journal, 1695-7, ...' (*Oriental Repertory*, volume I, number 1, pp. 69-94), from the East India Company records at Madras, is also found in IOR: MSS. Eur. Orme India.XIX, pp.26-42. Dalrymple and Orme give the same source, Dalrymple claiming that it 'was extracted by myself at Madrass, many years since' (*Oriental Repertory*, volume I, number 1, introduction, p. iv). 'Description of the ceded Countries on the Malabar Coast, by Lieut. John Comyn, 1793' (*Oriental Repertory*, volume 2, number 1, pp. 165-168) is copied in IOR: MSS.Eur. Orme India.XVII, pp. 5008-5011 and India.XVIII, pp. 5397-5399. Dalrymple gives William Pigou as the source of the letter (*Oriental Repertory*, volume 2, number 1, introduction, p. iv).

⁵⁴ *Oriental Repertory*, volume 2, number III, introduction, p. iv.

⁵⁵ See chapter 7, p. 00 below. Dalrymple's annual series of nautical publications discontinued at the same time, the last annual cumulation being that for the year ending 1 June 1794.

⁵⁶ Edward Cox was appointed printer to the East India Company in 1777 (Nichols, *Illustrations*, vol. viii, p. 524). His partnership with Bigg at 405 Strand had ended with the warehouse fire of 2 March 1776 (Maxted, *The London Book Trades, 1775-1800*, s.n. Cox and Bigg).

⁵⁷ *Oriental Repertory*, volume 2, number IV, introduction, pp. 1-2, and p. 514.

⁵⁸ For example, the copies in the Bodleian Library, Oxford, and the Niedersächsische Staats- und Universitätsbibliothek, Göttingen (4° H.As.II, 428)). The East India Company continued to take 64 copies of each number (Court Minutes, 1 October 1794 (IOR: B/119, p. 626) and 7 June 1797 (IOR: B/125, p. 241)).

⁵⁹ For example, Thomas Astle's copy, sold at auction by Christie's on 1 May 1991.

⁶⁰ *Oriental Repertory*, volume II, number 5 (see Catalogue A250).

⁶¹ William Ballintine first appears as a printer in February 1806, at 9 Duke Street, York Buildings, Strand (W. B. Todd, *A Directory of Printers and others in Allied Trades: London & Vicinity, 1800-1840*

(London, 1972), s.n. Ballintine, using primarily the Harvard broadside collection). He was printing, without partners, for Dalrymple in 1806 and early 1807 (*General Remarks for the Use of Those who have not been accustomed to navigate unfrequented Seas* 1806, with an editorial date of 27 April 1806 (see Catalogue A227); *A Voyage from England to the Red-Sea* 1806, with an editorial date of May 1806 (see Catalogue A228)). The first work for Dalrymple to bear the partnership imprint was *Memoir concerning the Geography of the Countries situated on Río de la Plata*, of 8 June 1807 (Catalogue A241). Todd, *A Directory of Printers*, dates the start of the partnership only to 4 July 1807, again using Harvard broadside collection evidence. With one exception this partnership appears in the imprint or colophon of all Dalrymple's publications up to and including the final *Case of Alexander Dalrymple* in June 1808. The Ballintine and Law partnership dissolved before 1810, and by 1812 Ballintine was in a new partnership with Joseph Byworth (Todd, *A Directory of Printers*, s.n. Ballintine).

⁶² *Oriental Repertory*, volume II 1808, second issue (Catalogue A251).

⁶³ *Memoir of a Chart of the Passage to the Eastward of Banka* 1806. When Dalrymple sent Francis Beaufort a set of his publications in November 1805 (LC: G1059.D23), he included a copy of as much of this tract as had previously been printed, probably by Bigg in the early 1790s. Ballintine added the title-page and other preliminary notices (see Catalogue A229). A copy of pages 17-52 survives among the miscellaneous printed sheets in Thomas Grenville's collection in the British Library (BL: G.2197.(2.)).

⁶⁴ *Oriental Repertory*, volume I 1793, second issue 1808 (see Catalogue A193).

⁶⁵ *Observations on the Copper Coinage wanted for the Circars* 1794, advertisement, p. i; *Oriental Repertory*, volume I, number 3, introduction, pp. iii-iv.

⁶⁶ East India Company, Court Minutes, 18 March 1794 (IOR: B/118, p. 904): 'Letter from Mr. Alexander Dalrymple dated the 14th Instant was read, enclosing some observations on the Copper Coinage for the Circars, which he advises, may be printed for the purpose of obtaining further information on the subject, Resolved that Mr. Dalrymple be desired to print the observations aforementioned, and that two hundred Copies be taken by the Company.' Dalrymple was in correspondence with Matthew Boulton over coinage design (Birmingham Reference Library, Archives Department: Matthew Boulton Papers (Dalrymple to Boulton, 4 June 1794; undated draft of letter from Boulton to Dalrymple)).

⁶⁷ *Memoir of the Chart of the South Coast of Pegu* 1791 (Catalogue A183). The only known copy, in Thomas Grenville's collection (BL: G.2197.(18.)) is incomplete, but includes (pp. 6-7) an analysis of the two maps of Ava River published in *Oriental Repertory*, volume I, number 2 (Catalogue B682 911117a Ava River/Baker, and B684 911124 Ava River/Rennell).

⁶⁸ See note 40 above, and *Some Remarks made at Mauritius* 1793 (Catalogue A199). Noble had experienced voyages on both British and French East-Indiamen: his paper *The French, and English, Marine Regulations Compared* [1793] (Catalogue 200) condemns French practices, and then describes British practices as worse by comparison. There is a flavour of this in his opinion of the French charts of

D'Après de Manneville (see chapter 4, note 22, above). It is surprising, not that Noble should have written this, but that Dalrymple should have first omitted it from *Some Remarks at Mauritius* 1793 and then ordered it printed. The only copy so far known to survive is in Thomas Grenville's collection (BL: G.2198.(16.)).

⁶⁹ Catalogue B1083 070427 Prince Wales Island and B1084 070502 Prince Wales Island. For the sixteen charts associated with *Memoir of a Chart of the Passages at the Southern Extremity of Asia* 1805, see the list in Catalogue A224.

⁷⁰ 'Sketch of an Intended Publication, by Mr. Dalrymple', *The Calcutta Magazine and Oriental Museum*, vol. i (November 1791), pp. 183-185.

⁷¹ *Oriental Repertory*, volume 2, number 1, p. 85n.

⁷² 'Geographical Description of the Sooloo Islands', in Lawrence Dundas Campbell, *The Asiatic Annual Register ... for the Year 1804* (London, 1806), pp. 44-59.

CONCLUSION

'THE IMPUTATION OF HAVING DONE LITTLE'

The introduction of the income tax in 1799 had a immediate effect on Dalrymple: he ordered booksellers holding stocks of his publications to cease selling on 31 January 1799, and to return unsold stock.¹ He had routinely carried his publications on his personal account, and he saw himself liable for income tax on his gross receipts, irrespective of past production costs, which he intended long-period sales should recover. His letter of 9 March 1805 to Melville explained his difficulty:

The absolute Impossibility for me to ascertain my Profits as a Publisher, in an account of above 30 years standing, when many early Publications are not yet sold off, where a complex Expense has occurred, part defrayed by the East India Company and part by myself, with large disbursements by me for repairing Plates & Printing what may be several years unsold. When the Tax was first laid on These Considerations induced me to stop all Sale of my Publications of every kind, Nautical as well as Literary: But the East India Company having no compleat Set remaining and The Admiralty having agreed to supply The Royal Navy with my Nautical Publications I could no longer desist the Sale without Injury to the Publick, altho' I should be obliged (however unreasonably) to pay the Tax on the whole amount of the Receipts.²

Publishing, for Dalrymple, was an intensely personal activity. When he began examining ships' journals in East India House or arranging the manuscripts in the Hydrographical Office, it was not with the aim of producing a specific comprehensive atlas or set of sailing directions. The charts, plans, views and memoirs he issued as he developed intellectual control over a subject were intended to demonstrate, as much to himself as to others, stages in the progress of research. Knowledge, to be valid, had to be disseminated.

Dalrymple was unselfish in his publication of the knowledge he gained, but self-centred in his pursuit of it. Unwilling to be restricted by the commercial viability of projects, he preferred to work to his own terms

of reference under official subsidy, either by grant or by inflated subscription list. *Oriental Repertory* was funded by both an initial grant and a supposed guarantee of subscriptions; for *A Collection of Plans of Ports in the East Indies* the East India Company funded 100 out of 110 subscriptions; the whole publication of charts, views, plans and memoirs for the Company after 1779 was officially subsidised. A corollary of this lack of commercial impetus was a deliberate open-endedness. For Dalrymple success and achievement was to continue to publish, rather than to complete a publication. He could never have produced a *Neptune Oriental*, an *East India Directory*, or an atlas of *Charts of the English Channel*.³ The idea of forming materials of widely differing quality, utility and interest, into a general atlas according to a pre-arranged plan was not one he found congenial. His compilation in 1807 of a worldwide list of charts from British publishers is a remarkable 'snapshot' of contemporary charting, but he declined to make a selection for fleet use, on the grounds that the data of their construction was no longer available to allow critical evaluation.⁴ He saw as intellectually barren the task for which he proposed a Chart Committee of naval officers, and, provided he could continue with his own researches, he was content to have no part of their work.

The comprehensive series of accurate charts he envisaged for the East India Company, was to have as its groundwork a complete index of all observations in Company ships' journals. He forestalled criticism by claiming the need for preparatory work, but the plans and views intended as avatars of his chart work came to dominate his output almost to the exclusion of the publication of charts. Dalrymple's Company collections were essentially subjective in composition, the choice of subject matter and geographical area of charts, views, plans or memoirs remaining with Dalrymple. He issued successive or parallel

representations of the same harbours or coasts, each adding to an accumulation of information, rather than to its refinement.

For the Admiralty Dalrymple spent five years arranging and evaluating manuscript surveys, until he could say that in 1800 the Hydrographical Office 'was made efficient'. The expectations of the Board of Admiralty, and of fleet officers, had been stimulated, however unjustifiably, by this period of waiting, and Dalrymple continued at a disadvantage thereafter in the slow production of charts and plans which he could certify as accurate. While the Company supplemented Dalrymple by countenancing the parallel publication of charts by James Horsburgh after 1805,⁵ the Board of Admiralty (particularly after Marsden's retirement) confronted Dalrymple with directives. The opportunity to meet the fleet's needs by turning the Hydrographical Office into a chart evaluation and supply department was offered to Dalrymple, who turned it aside to the rising Chart Committee. If the Committee had not succeeded in gaining an ascendancy over the Hydrographical Office in the matter of the D'Entrecasteaux charts, their next shot was already loaded. Their letter of 26 May 1808 proposed the course to follow:

There are many important parts of the World, of which we have no tolerable Charts Published, the materials to supply the deficiencies, may in considerable degree be obtained from Manuscripts, in the Hydrographic Office, and they should be engraved in the Common Course of business in that Office, but we fear that little benefit can be expected from that Quarter, unless Their Lordships should be pleased to Command Mr. Dalrymple to employ the engravers upon such Charts only, and in such a progressive Order, as they might direct. If Their Lordships should think proper, to cause a suitable list to be made out, it would also be advisable, that whoever they might entrust with this duty, should also be authorized to determine the proper Scale, and projection of each; in order to avoid Mr. Dalrymple's circular projection, the impropriety of which, for nautical purposes, it were needless to point out; and his System of Scales, by which many useful Surveys have been materially injured.⁶

Aware of these proposed changes, and anticipating Dalrymple's likely reaction to them, Pole, as Secretary to the Board of Admiralty, tried on

28 May 1808 to persuade the 70-year-old Hydrographer into retirement.⁷ Despite Dalrymple's refusal to be superannuated, rooted in his inability to contemplate ceasing his geographical investigations,⁸ dismissal and death followed. But his achievement remained.

For both the East India Company and the Admiralty Dalrymple laid down the basis of a Hydrographic Office. Horsburgh, appointed in 1810 to the salaried office the Company had never provided for Dalrymple,⁹ developed the Chart Office for chart compilation and supply in East India House. Hurd, Parry and Beaufort successively expanded the Hydrographic Office of the Admiralty, with increasingly effective chart coverage of the world's oceans. At the centre of both operations, for half a century after Dalrymple's death, was the body of charts, views, plans and nautical memoirs Dalrymple had himself published. Dalrymple's publications amounted to over 1100 charts, plans and views, and over 250 letterpress publications. With his meticulous editorial control, and the use of a few selected engravers and printers, Dalrymple's publications demonstrate a family resemblance which has both unified and isolated them as a body of scholarship, awaiting systematic identification and description as a connected body of source material for British nautical history both in Home waters and in the East Indies.

Though he was severely criticised in later years, Dalrymple's integrity was never in doubt, and his industry hardly less so. It was his capacity to handle the increasing business and changing requirements of the hydrographic offices he had created which was called into question, when the quality of his work aroused expectations of speed and comprehensiveness in chart publication which he could not fulfil alone. Though truly 'an author voluminous and vast', it was ironically his success in demonstrating what could be published from available knowledge that brought him 'the imputation of having done little'.

NOTES TO CONCLUSION: 'THE IMPUTATION OF HAVING DONE LITTLE'

* 'I am well aware that, in every Undertaking of the kind proposed, The Labours of the first Year are the greatest, & make the least Shew, so that I must, in the opinion of Men who are not fully apprized of the Nature of the Work, be exposed to the imputation of having done little.' (Dalrymple to Court of Directors, 8 April 1779 (East India Company, Miscellaneous Letters Received, 1779 (London, India Office Records [IOR]: E/1/64, p. 77))).

¹ 'After the 31 January 1799, so long as the Income Act continues in force, no Publications, whether Books, Charts, Plans, Views, Maps or Pamphlets, must be sold on my account, in case any such remain in your hands unsold, You will please to return them to me and settle the account to that day.' (Dalrymple to John Stockdale, Bookseller, Piccadilly (Laing Manuscripts (Edinburgh University Library [EUL]: La.11.589/2))).

² Dalrymple to Melville, 9 March 1805 (Chatham Papers (London, Public Record Office [PRO]: PRO.30/8/128). Melville appears to have forwarded Dalrymple's letter to Pitt, at the writer's request.

³ J. B. N.-D. D'Après de Manneville, *Le Neptune Oriental* (Paris, 1745), and second edition (Paris, 1775); James Horsburgh, *Directions for Sailing to and from the East Indies*, 2 vols. (London, 1809-1811) [later editions called *East India Directory*]; Thomas Hurd, *Charts of the English Channel* (London, 1813).

⁴ Dalrymple to Pole, 24 November 1807 (PRO: ADM.1/3522).

⁵ [James Horsburgh,] *Memoirs: Comprising the Navigation to and from China, by the China Sea, and through the various Straits and Channels in the Indian Archipelago; also, the Navigation of Bombay Harbour* (London, 1805). Dalrymple's relations with Horsburgh were cordial and friendly: he proposed to recommend Horsburgh as a candidate for the Royal Society in 1805 (Dalrymple to Horsburgh, 19 September 1805 (Laing Manuscripts (EUL: La.11.589/3))).

⁶ Chart Committee letter to Pole, 26 May 1808 (PRO: ADM.1/3523).

⁷ Pole to Dalrymple, 28 May 1808, copied in Dalrymple's letter to Melville, 30 May 1808 (Melville Papers (Edinburgh, Scottish Record Office: GD.51/2/399/2): 'My Lord Commissioners of the Admiralty having had under their consideration several new arrangements, which are intended speedily to be carried into execution, in the Department over which You at present preside, which arrangements will require great and continued exertions on the part of the Hydrographer; and their Lordships being fully aware that at your advanced period of Life it would not be possible for you to undertake and carry through measures of such a laborious and complicated nature as those in contemplation, without great Injury to your health, and inconvenience to the public Service, have commanded me to acquaint You, that they deem it expedient to remove You from the Office of Hydrographer to the Admiralty, ...'

⁸ A year after Dalrymple died, Charles Wilkins reported recovering from Dalrymple's house, at the request of his executors, 692 ships' journals and 35 other volumes, the property of the East India Company (East India Company, Court Minutes, 28 June 1809 (IOR: B/149, p. 449)).

⁹ East India Company, Court Minutes, 31 October 1810 (IOR: B/152, p. 985).

APPENDIX 1

SHORT-TITLE LIST OF DALRYMPLE'S LETTERPRESS PUBLICATIONS DESCRIBED IN CATALOGUE A

- A1 An Account of the Discoveries made in the South Pacific Ocean
1767
- A2 The Memorial of Alexander Dalrymple 1768
- A3 An Account of what has passed between the India Directors and
Alexander Dalrymple 1768: First edition
- A4 An Account of what has passed between the India Directors and
Alexander Dalrymple 1768: Second edition 1768/1769
- A5 A Plan for Extending the Commerce of this Kingdom 1769
- A6 Memoir of a Chart of the Southern Ocean 1769
- A7 A Letter to the Proprietors of India Stock, concerning the
proposed Supervisors 1769
- A8 A Letter to the Court of Directors ... concerning the proposed
Supervisorship 1769
- A9 A Second Letter concerning the proposed Supervisorship 1769
- A10 Vox Populi Vox Dei. Lord Weymouth's Appeal ... considered 1769
- A11 An Historical Collection of the Several Voyages and Discoveries
in the South Pacific Ocean. Volume I 1769/1770
- A12 An Historical Collection of the Several Voyages and Discoveries
in the South Pacific Ocean. Volume II 1771
- A13 Memoir of a Chart of the China Sea 1771: First edition
- A14 Essay on the Most Commodious Methods of Marine Surveying
1771: First edition
- A15 Memoir of the Chart of Part of the Coast of China 1771: First
edition
- A16 Journal of the Schooner Cuddalore ... on the Coast of China
1771: First edition
- A17 Journal of the Schooner Cuddalore on the Coast of Hainan 1771:
First edition
- A18 Memoir of the Chart of the West Coast of Palawan 1771: First
edition
- A19 The Country called, in the Maps, New Zeland ... 1771
- A20 Considerations on a Pamphlet 1772
- A21 A Collection of Charts and Memoirs 1772
- A22 General Introduction to the Charts and Memoirs 1772: First
edition
- A23 Memoir of a Chart of the Bay of Bengal 1772: First edition
- A24 A General View of the East-India Company 1772
- A25 I am always inclined to respect the institutions of every
Community ... [1772]
- A26 The Rights of the East-India Company 1773
- A27 A Letter from Mr. Dalrymple to Dr. Hawkesworth 1773
- A28 Proposals for engraving by Subscription sundry Plans of Ports
&c. in the East Indies 1773
- A29 Mr. Dalrymple's Observations on Dr. Hawkesworth's Preface to the
Second Edition 1773

- A30 Señor. El Doctor Iuan Luis Arias, dize ... 1773
- A31 Descripcion segura y verdadera ... [1773]
- A32 Derrota del Puerto de Cavite al Embocadero de San Bernardino ... [1773]
- A33 MS. A. De Romblon a la punta de Bulacave ... [1773]
- A34 [Proposition for printing ... the MS Voyages and Travels in the British Museum 1773]
- A35 Plans of Ports in the East Indies 1 1774
- A36 Plans of Ports in the East Indies 2 1774
- A37 Plans of Ports, &c. in the East Indies 3 1774
- A38 A Full and Clear Proof, that the Spaniards can have no Claim to Balambangan 1774
- A39 Plans of Ports, &c. in the East Indies 4 1774
- A40 To the Proprietors of East-India Stock 1774
- A41 To the Proprietors of East-India Stock 1775
- A42 [Plans of Ports, &c. in the East Indies 5] 1775
- A43 [Plans of Ports, &c. in the East Indies 6] 1775
- A44 A Collection of Plans of Ports in the East Indies 1775: First edition
- A45 A Collection of Voyages chiefly in the Southern Atlantick Ocean 1775
- A46 Copies of Papers relative to the Restoration of the King of Tanjore. Volumes I and II 1777
- A47 Lord Pigot's Narrative [1777]
- A48 To the Proprietors of East India Stock 1777: 22 April handbill
- A49 The very extraordinary revolution ... 1777
- A50 To the Proprietors of East-India Stock 1777: 8 May pamphlet
- A51 Every Decision of a Court of Justice ... 1777
- A52 On the 26th March a general Court ... 1777
- A53 Letter to the Court of Directors of the East India Company 1777
- A54 A Comparison of the several Tracks of the Company's Ships ... 1778
- A55 Considerations on the Present State of Affairs between England and America 1778
- A56 Explanation of the Map of the East-India Company's Lands on the Coast of Choromandel 1778
- A57 Journal of a Voyage to The East Indies, in the Ship Grenville 1778
- A58 A Reply to a Letter from Andrew Stuart, Esq. [1778]
- A59 Notwithstanding the many years that the Europeans have navigated to India ... 1779
- A60 The East-India Company having thought proper to employ me ... 1779
- A61 Considerations on the East-India Bill 1779
- A62 State of the East India Company 1780
- A63 An Account ... of The Going of a Pocket Chronometer 1780
- A64 Some Notes useful to those who have Chronometers at Sea [1780]
- A65 The following Collection concerning Papua ... [1780]

- A66 Remarks on the Bloachee, Brodia and Arabian Coasts 1781: First edition
- A67 A Voyage in the Flying-Eagle from Bantam to Baber 1781
- A68 Journal of the Jane ... from Banjar to Timor 1781
- A69 Journal of Ship London ... along the North Coast of Magindanao 1781: First edition
- A70 Collection of Views of Land and of Plans of Ports in the East-Indies 1781: First edition
- A71 A Letter from M. Christian Mayer 1781
- A72 Memoir concerning the Passages to and from China 1782: First edition
- A73 A Brief Statement of the Prevailing Winds 1782: First edition
- A74 An Historical Relation of the Several Expeditions from Fort Marlborough 1775: Second edition 1782
- A75 A Collection of Plans of Ports in the East Indies 1775: Second edition 1782
- A76 Strait of Allass [1782]
- A77 An Answer from John Arnold to an Anonymous Letter on the Longitude 1782
- A78 M. D'Anville's printed Works [1782]
- A79 List of Plans of Ports, &c. 1783
- A80 Collection of Charts, Views of Land and Plans of Ports in the East Indies 1783
- A81 An Account of the Loss of the Grosvenor Indiaman 1783: First edition
- A82 General Collection of Nautical Publications 1783
- A83 General Introduction to a Collection of Plans of Ports &c. in the Indian Navigation 1783
- A84 A Collection of Views of Land in the Indian Navigation 1783
- A85 Reflections on the Present State of the East-India Company 1783
- A86 Short Account of the Gentoo Mode of Collecting the Revenues 1783
- A87 Memoir of a Chart of the East Coast of Arabia 1783: First edition
- A88 Memoir of a Chart from St John's on the Coast of India to Cape Arubah on the Coast of Persia 1784: First edition
- A89 Explanations to Plans of Ports, &c. 1784: First edition
- A90 A Retrospective View of the antient System of the East-India Company 1784
- A91 Case of Alexander Dalrymple, Esq. 1784
- A92 Proposition for a Survey of the Coast of Choromandel 1784
- A93 An Hydrographical Journal of a Cursory Survey of the Coasts and Islands in the Bay of Bengal 1784: First edition
- A94 Collection of Nautical Papers concerning the Bay of Bengal 1785: First edition
- A95 Appendix to Capt. Ritchie's Survey of the Bay of Bengal 1785: First edition
- A96 Memoir concerning the Passages to and from China 1782: Second edition 1785

- A97 Postscript to Mr. Dalrymple's Account of the Gentoo Mode of Collecting the Revenues 1785
- A98 Extracts from Juvenilia or Poems by George Wither 1785
- A99 Memoir of a Chart from Cape Mons to Acheen 1785
- A100 An Account of the Loss of the Grosvenor Indiaman 1783: Second edition 1785
- A101 Appendix to the Account of the Loss of the Grosvenor Indiaman [1785]
- A102 Memoir concerning the Chagos and adjacent Islands 1786
- A103 Memoir of a Chart of the China Sea 1771: Second edition 1786
- A104 Memoir of the Chart of the Straits of Sunda and Banka 1786: First edition
- A105 Appendix to Memoir of Chart of Sunda and Banka [1786]
- A106 General Introduction, to the Charts and Memoirs 1772: Second edition 1786
- A107 Essay on Nautical Surveying 1771: Second edition 1786
- A108 Memoir of the Chart of Part of the Coast of China 1771: Second edition 1786
- A109 Journal of the Schooner Cuddalore ... on the Coast of China 1771: Second edition 1786
- A110 Journal of the Schooner Cuddalore on the Coast of Hainan 1771: Second edition 1786
- A111 Memoir of the Chart of the West Coast of Palawan 1771: Second edition 1786
- A112 Instructions concerning the Chronometers ... sent to Bombay 1786
- A113 Memoir of the Chart of the Natunas, Anambas and adjacent Islands 1786
- A114 A Fair State of the Case between the East India Company, and the Owners of Ships 1786
- A115 List of Classes into which are distributed the Plans of Ports, &c. 1786
- A116 List of Classes into which are distributed the Plans of Ports, &c. 1786 [Year 7 Addenda 1786]
- A117 An Account of the Navigation between India and the Gulph of Persia 1786
- A118 A Serious Admonition to the Publick, on the Intended Thief-Colony at Botany Bay 1786
- A119 A Brief Statement of the Prevailing Winds 1782: Second edition 1787
- A120 Captain Taylor's Remarks, in Ship Ceres [1782]: Second edition [1787]
- A121 Madeira [1787]
- A122 An Account of a Shoal to the Eastward of the Cape of Good Hope [1787]
- A123 Memoir of a Chart of the Indian Ocean 1787
- A124 China Seas [1787]
- A125 Memoir of a Chart of the East Coast of Arabia 1783: Second edition 1787
- A126 Remarks on the Bloachee, Brodia and Arabian Coasts 1781: Second edition 1787

- A127 Memoir of a Chart from St John's on the Coast of India to Cape Arubah on the Coast of Persia 1784: Second edition 1787
- A128 A Collection concerning the Bay of Bengal 1787
- A129 Memoir of a Chart of the Bay of Bengal 1772: Second edition 1787
- A130 Collection of Nautical Papers, concerning the Bay of Bengal 1785: Second edition 1787
- A131 An Hydrographical Journal of a Cursory Survey of the Coasts and Islands in the Bay of Bengal 1784: Second edition 1787
- A132 Appendix to Capt. Ritchie's Survey of the Bay of Bengal 1785: Second edition 1787
- A133 Memoir concerning the Passages to and from China 1782: Third edition 1787
- A134 Memoir of the Chart of the Straits of Sunda and Banka 1786: Second edition 1787
- A135 General Introduction to the Charts and Memoirs 1772: Third edition 1787
- A136 Essay on Nautical Surveying 1771: Third edition 1787
- A137 Memoir of a Chart of the China Sea 1771: Third edition 1787
- A138 Memoir of the Chart of Part of the Coast of China 1771: Third edition 1787
- A139 Journal of the Schooner Cuddalore ... on the Coast of China 1771: Third edition 1787
- A140 Journal of the Schooner Cuddalore on the Coast of Hainan 1771: Third edition 1787
- A141 Mr. Larkins's Observations concerning the Chart and Passage from St. John's to the Ladrone [1787]
- A142 Memoir of the Chart of the West Coast of Palawan 1771: Third edition 1787
- A143 A Collection of Plans of Ports in the East Indies 1775: Third edition 1787
- A144 Collection of Plans of Ports in the East Indies 1781: Second edition 1787
- A145 Explanations to Plans of Ports &c. 1784: Second edition 1787
- A146 List of Classes into which are distributed the Plans of Ports, &c. 1786 [Year 8 Addenda 1 1787]
- A147 List of Classes into which are distributed the Plans of Ports, &c. 1786 [Year 8 Addenda 2 1787]
- A148 It is well known that the Sun must come to the Meridien ... 1787
- A149 Remarks and Observations in a Survey of the Chagos Archipelago 1788
- A150 Strait of Sinkapore 1788
- A151 Review of the Contest, concerning Four New Regiments 1788
- A152 Memoir concerning the Passages, at a Late Season, from India to China 1788
- A153 Instructions concerning Arnold's Chronometers 1788
- A154 List of Classes into which are distributed the Plans of Ports, &c. 1786: Advertisement 1788
- A155 List of Classes into which are distributed the Plans of Ports, &c. 1786 [Year 9 Addenda 1788]

- A156 A Journal of the Esther Brig ... from Bengal to Quedah 1788
- A157 Remarks on a Passage from Po. Wawoor, to the Strait of Sunda 1789
- A158 Account of the Passage of the Ship Atlas ... to the Eastward of Banka 1789
- A159 Account of the Passage of the Ship Warren-Hastings ... by the Macklesfeild Strait 1789
- A160 Plan for Promoting the Fur-Trade 1789
- A161 List of Classes into which are distributed the Plans of Ports, &c. 1786 [Year 10 Addenda 1789]
- A162 List of Charts, Plans of Ports, &c. 1789
- A163 Nautical Memoirs and Journals 1789
- A164 Memoir of a Map of the Lands around the North-Pole 1789
- A165 An Exact and True Description of the Coasts, Ports, Islands and Shoals ... of Luzon 1789: First edition
- A166 Description of the Coast of India 1789: First edition
- A167 A Letter to a Friend, on the Test Act 1790
- A168 The Spanish Pretensions Fairly Discussed 1790
- A169 Charts, and Plans, &c. [1789-1790] 1790
- A170 List of Classes into which are distributed the Plans of Ports, &c. 1786 [Year 11 Addenda 1790]
- A171 The Spanish Memorial of 4th June considered 1790
- A172 Considerations on M. Buache's Memoir concerning New-Britain 1790
- A173 An Historical Journal of the Expeditions, by Sea and Land, to the North of California 1790
- A174 A Description of the Island called St Paulo 1790
- A175 Practical Navigation [1790]
- A176 A Plan for the Publication of a Repertory of Oriental Information 1790
- A177 Memorial of Alexander Dalrymple 1791
- A178 Oriental Repertory: [Volume I] Number 1 1791
- A179 Certificates and Circumstances relative to the Going of Mr. Arnold's Chronometers 1791: First edition
- A180 Continuation of the Description of the Coast of Malabar 1791: First edition
- A181 Charts, and Plans, &c. [1790-1791] 1791
- A182 List of Classes into which are distributed the Plans of Ports, &c. 1786 [Year 12 Addenda 1791]
- A183 Memoir of the Chart of the South Coast of Pegu 1791
- A184 Oriental Repertory: [Volume I] Number 2 1791
- A185 Catalogue of Printed Books and Tracts 1792
- A186 Charts, Views, and Plans, &c. [1791-1792] 1792
- A187 List of Classes into which are distributed the Plans of Ports, &c. 1786 [Year 13 Addenda 1792]
- A188 Oriental Repertory: [Volume I] Number 3 1792
- A189 Parliamentary Reform, Improper in the Present State of this Country 1792: First Edition

- A190 Parliamentary Reform, as it is called, Improper in the Present State of this Country 1792: Second edition
- A191 Oriental Repertory: Volume I [Number 4] 1793
- A192 Oriental Repertory: Volume I 1793
- A193 Mr. Fox's Letter to His worthy and independent Electors of Westminster, fully considered 1793
- A194 Charts, and Plans, &c. [1792-1793] 1793
- A195 List of Classes into which are distributed the Plans of Ports, &c. 1786 [Year 14 Addenda 1793]
- A196 Journal of the Schooner Cuddalore through the Strait of Sapy 1793
- A197 Memoir on Watering the Circars 1793
- A198 Appendix to the Memoir on Watering the Circars 1793
- A199 Some Remarks made at Mauritius 1793
- A200 The French, and English, Marine Regulations Compared [1793]
- A201 Collection of Papers concerning the Navigation, Winds, and Weather, at the French Islands Mauritius and Bourbon 1794
- A202 Oriental Repertory: Volume 2 Number I 1794
- A203 Observations on the Copper Coinage wanted for the Circars 1794
- A204 A Survey of the Pulicat Shoals 1794
- A205 Plans, &c. [1793-1794] 1794
- A206 List of Classes into which are distributed the Plans of Ports, &c. 1786 [Year 15 Addenda 1794]
- A207 Oriental Repertory: Volume 2 Number II 1794
- A208 Oriental Repertory: Volume 2 Number III 1794
- A209 The Story of Dooshwanta and Sakoontala 1795: First edition
- A210 The Story of Dooshwanta and Sakoontala 1795: Second edition
- A211 The Poor Man's Friend 1795
- A212 A Collection of English Songs 1796
- A213 Plans of Positions of the British Squadron and Spanish Fleet in the Action on the 14th February, 1797 [1797]
- A214 Oriental Repertory: Volume 2 Number IV 1797
- A215 Directions. Asia Shoal, or Carrang Lebar ... [1797]
- A216 A Fragment on the India Trade 1797
- A217 Observations on the Navigation of the Eastern Seas 1797
- A218 Concerning the Passage to the Cape of Good Hope and China ... 1799
- A219 Memoir of a Chart from the Strait of Allass to the Island Bouro 1799
- A220 Thoughts of an Old Man, of Independent Mind 1800
- A221 Rules and Regulations to be observed by Persons employed under the Hydrographer to the Admiralty [1801]
- A222 Memoir concerning the Hydrographical Map of Part of Ægypt [1801]
- A223 Form of Remark-Book [1804]
- A224 Memoir of a Chart of the Passages at the Southern Extremity of Asia 1805
- A225 Esquirques, vide Plan. Rock off the South End of Sardinia 1806

- A226 Longitude. A Full Answer to the Advertisement concerning Mr. Earnshaw's Timekeeper 1806
- A227 General Remarks for the Use of Those who have not been accustomed to navigate unfrequented Seas 1806
- A228 A Voyage from England to the Red-Sea 1806
- A229 Memoir of a Chart of the Passage to the Eastward of Banka 1806
- A230 Memoir of a Chart of the N W Coast of Madagascar 1806
- A231 Memoir concerning the Pirates on the Coast of China 1806
- A232 Essay on Nautical Surveying 1771: Fourth edition 1806
- A233 Olinchy Bay [1806]
- A234 Harbour of He-ong-Kong [1806]
- A235 Description of the Coast of India 1789 and 1791: Second edition 1806
- A236 Collection of Nautical Memoirs and Journals 1806
- A237 Observations on the South Coast of China, and Island of Hainan 1771: Fourth edition 1806
- A238 Fernando Noronha [1806]
- A239 The Nature and Properties of the Winds and Moussons in the Navigation from England to the East Indies 1807
- A240 On the Catholic Question 1807
- A241 Memoir concerning the Geography of the Countries situated on Rio de la Plata 1807
- A242 Notes on Two Letters to Brother Abraham, concerning the Roman Catholics 1807
- A243 Collection of Nautical Papers concerning the Bay of Bengal 1785: Third edition 1807
- A244 An Hydrographical Journal of a Cursory Survey of the Coasts and Islands in the Bay of Bengal 1784: Third edition 1807
- A245 Appendix to Capt. Ritchie's Survey of the Bay of Bengal 1785: Third edition 1807
- A246 Journal of Ship London ... along the North Coast of Magindanao 1781: Second edition 1807
- A247 Catalogue of Authors who have written on Rio de la Plata, Paraguay, and Chaco 1807
- A248 Capt. William Bradley's Account of the Soundings off Tory Island 1807
- A249 An Exact and True Description of the Coasts, Ports, Islands and Shoals ... of Luzon 1789: Second edition 1808
- A250 Oriental Repertory: Volume II [Number 5] 1808
- A251 Oriental Repertory: Volume II 1808
- A252 Extract of a Letter ... relative to the probable existence of the Telemaque Shoal 1808
- A253 Directions for the Mouth of Rio de la Plata 1808
- A254 Case of Alexander Dalrymple 1808
- A255 Collection of Papers concerning the Navigation, Winds and Weather 1794: Second edition 1809
- A256 Description of the Island, called St Paulo 1790: Second edition 1809
- A257 Remarks by Captain Kent, R.N. on the Harbour of Port St. Vincent 1809

APPENDIX 2

DATE AND KEYWORD LIST OF DALRYMPLE'S ENGRAVED CHARTS, VIEWS, PLANS AND DIAGRAMS DESCRIBED IN CATALOGUE B

The publication dates of the charts, views, etc. are given here in the short form of year, month and day (YYMMDD): for example 691020 signifies a chart published on 20 October 1769. The suffixes a, b, c, etc. are applied in this catalogue to provide a means of referring concisely to any one item among a number with the same engraved or attributed date.

B1	670000a Rocky Point views
B2	670000b Murderers Bay views
B3	670000c Three Kings Island view
B4	670000d Amsterdam/Pylstart views
B5	670000e Amsterdam Island views
B6	670000f Anamocka views
B7	671000 South Pacifick Ocean
B8	690000a Papua
B9	690000b Teepye Lobsters diagram
B10	690000c Eastern Asia
B11	690400 South America
B12	691020a World
B13	691020b Borneo [re-issued 750202]
B14	691026 Cuddalore/Palawan
B15	701130 Felicia
B16	710000a Bark of Indians illustration
B17	710000b Cocos Island view
B18	710000c Horn Island view
B19	710000d Horne Island Inhabitants illustration
B20	710000e Ontong Java view
B21	710000f Staats Land
B22	710000g Surveying diagrams 1-7
B23	710000h Surveying diagrams 8-15
B24	710000i Grand Ladron diagram
B25	710000j China/Mendoça
B26	710000k China views 1-7 [re-issued 831106]
B27	710000l China views 8-15 [re-issued 800501]
B28	710000m China views 16-24 [re-issued 800521]
B29	710000n China/Honghai
B30	710000o China views 1-5 [re-issued 831107]
B31	710000p Hainan
B32	710000q Hainan views [re-issued 831017]
B33	710121 China
B34	710419 China Sea
B35	710512 Palawan views
B36	711210 Sooloo Archipelago
B37	720915 Bay of Bengal
B38	740205a Algoa
B39	740205b Arackan River
B40	740205c Comoro
B41	740205d Flesh Bay

B42	740205e Johanna
B43	740205f Kings Island Road
B44	740205g Long Point
B45	740205h Manumbagh
B46	740205i Mayotta
B47	740205j Mew Bay
B48	740205k Mohila
B49	740205l Mossell Bay
B50	740205m Point Romania
B51	740205n Po Pinang
B52	740205o Rydangh
B53	740205p Socotra
B54	740205q Tavay River
B55	740205r Tollear Bay
B56	740205s Zinzinbara
B57	740205t Zutphen Islands
B58	740205u Compass rose diagram
B59	740225a Ayer-bongy
B60	740225b Bencoonat Bay
B61	740225c Billimbing Bay
B62	740225d Cawoor
B63	740225e Croee
B64	740225f Engano Bay
B65	740225g Engano Island
B66	740225h Indparour
B67	740225i Island Good Fortune
B68	740225j Nattal
B69	740225k Nayas
B70	740225l Padang Coast
B71	740225m Padang Settlement
B72	740225n Priaman
B73	740225o S Leaga Bay
B74	740225p Secockup
B75	740225q Se Laubo Laubo
B76	740225r So Pogy Island
B77	740225s Tappean-oely
B78	740425a Hurlock's Bay
B79	740425b Lampoon Bay
B80	740505a Karak
B81	740505b Sumatra views
B82	740630 Gingerah
B83	740710a Calapan
B84	740710b Capa-luan
B85	740710c Keyser's Bay
B86	740710d Lampon Bay
B87	740710e Palapa
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NOTE ON ILLUSTRATIONS

The following illustrations are included to show the form of Dalrymple's three main types of engraved work, the chart, the views of land, and the plan. They are not intended to be read for content, for which reference should be had to the corresponding catalogue entries. Exigencies of space have necessitated the use of reduced-size reproductions: the original size of each is noted below.

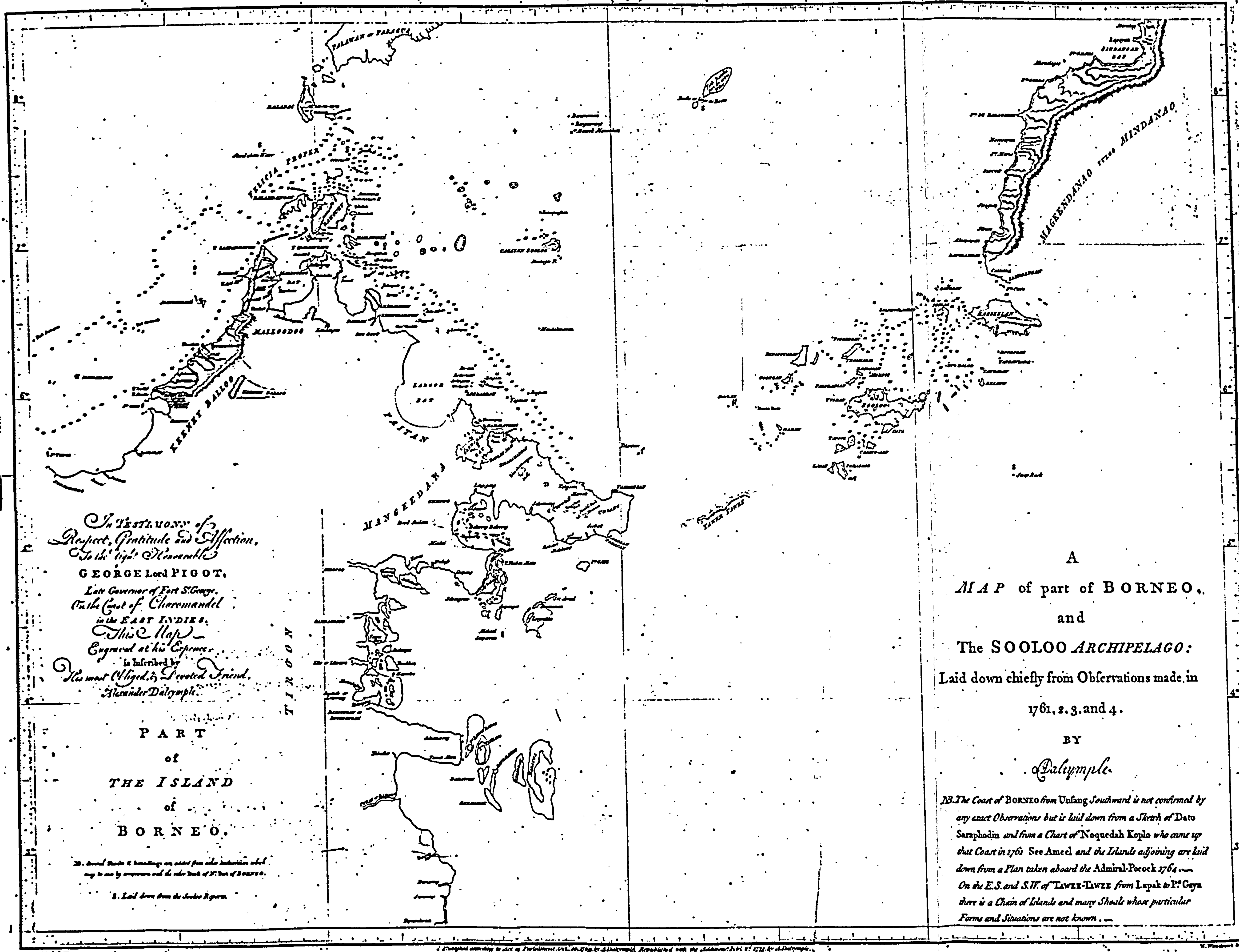
A Map of part of Borneo, and The Sooloo Archipelago: Laid down chiefly from Observations made in 1761, 2, 3, and 4. by &Dalrymple. Published 20 October 1769, fourth issue [1789]. Catalogue B13 691029b Borneo. Original size 25 x 19 inches.

New Holland, Sumbawa, Lombock, Bally and Madura [views]. Published 1 March 1780. Catalogue B178 800301d New Holland views. Original size 25 x 12 inches.

Plan of Demaon ... From an accurate Survey by John McCluer 1788. Published 28 February 1790. Catalogue B625 900228 Demaon. Original size 9 x 12 inches.

Harbour and Road of Suez in the Red Sea, by George Trotter, Master of the Swallow, 1777. Published 10 November 1779. Catalogue B162 791110 Suez. Original size 9 x 12 inches.

Sketch of the Bay SW of Suez by J. Ellis, From a MS in Admiral Blanket's Collection. Published 31 May 1806. Catalogue B1063 060531h Suez. Original size 9 x 14 inches.



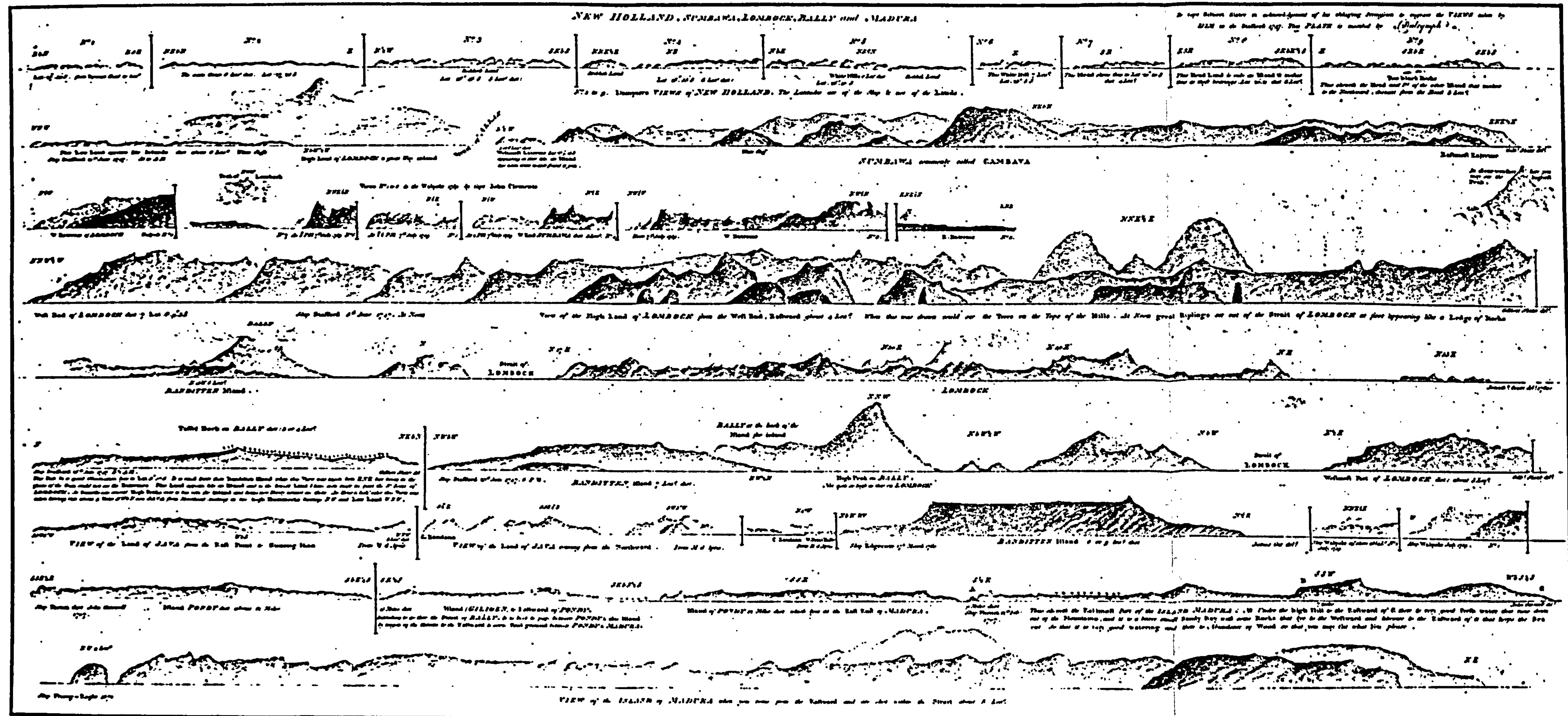
*In Testimony of
Respect, Gratitude and Affection,
To his Right Honourable
GEORGE LORD PIGOT,
Late Governor of Fort St. George,
On the Coast of Choremandel
in the EAST INDIES,
This Map
Engraved at his Expense,
is Intended by
His most Obedient & Devoted Friend,
Alexander Dalrymple.*

PART
of
THE ISLAND
of
BORNEO.

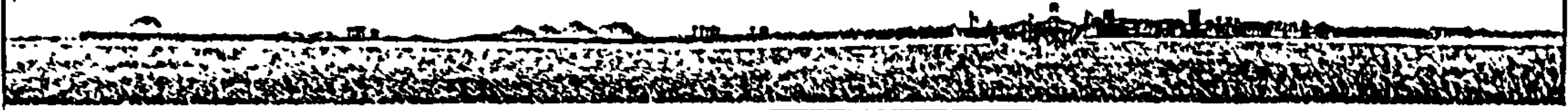
1. Several Islands & boundaries are added from other authorities which
may be seen by comparison with the older Maps of 1761 & 1764.
2. Laid down from the Surveys & Reports.

A
MAP of part of BORNEO,
and
The SOOLOO ARCHIPELAGO:
Laid down chiefly from Observations made in
1761, 2, 3, and 4.
BY
Dalrymple.

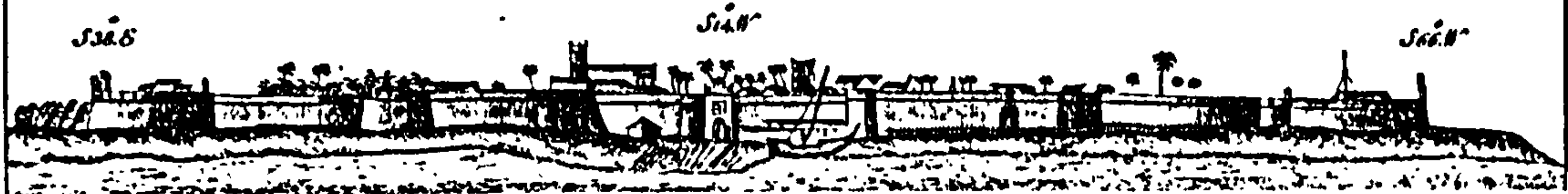
13. The Coast of BORNEO from Unfang Southward is not confirmed by
any exact Observations but is laid down from a Sketch of Dato
Saraphodin and from a Chart of Noquedah Koplo who came up
that Coast in 1761. See Amed and the Islands adjoining are laid
down from a Plan taken aboard the Admiral Pocock 1764.
On the E.S. and S.W. of Tawet-Tawet from Lapak to P. Gaya
there is a Chain of Islands and many Shoals whose particular
Forms and Situations are not known.



DEMON from 17 at 2^d Station 24th March 1788. Hill a as it appears in the Entrance of the River, is the leading-mark over the Bar.



DEMON Fort, taken in the River, at 250 yards distance.



PLAN of DEMON

Lat. 26. 27. 30 N. Long. 6. 43. 1 E. of Surat Bar

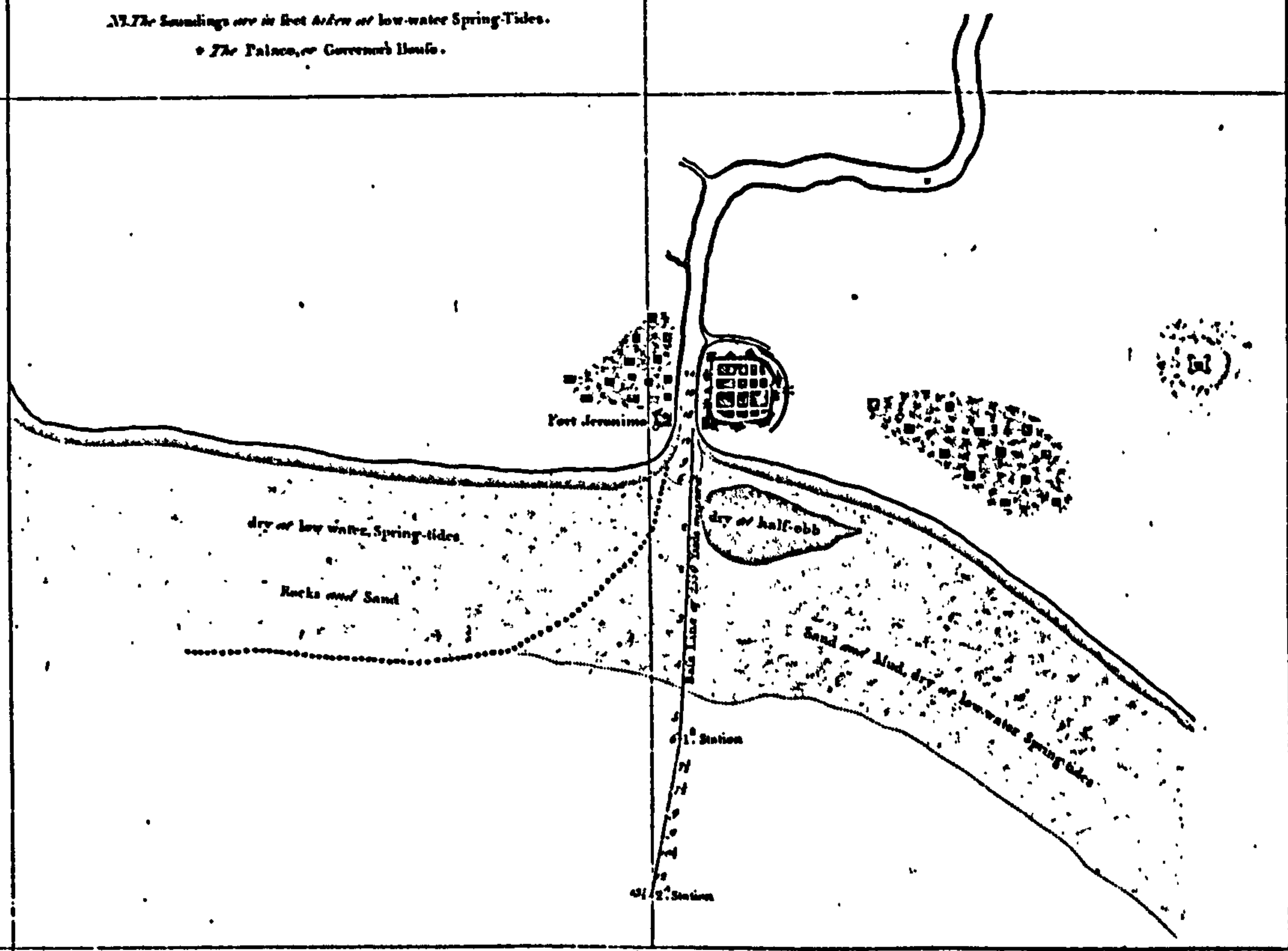
From an accurate Survey by

John M^r Cluer

1788.

All the Soundings are in Feet taken at low-water Spring-Tides.

** The Palace, or Governor's House.*



Natural Miles.

Engraved according to Act of Parliament by Robert G. 200. 1790.

All the Shoals in the R O A U are 2 feet under water at low water spring Tides.



Published according to Act of Parliament, 10th Nov. 1779. by J. D. A. v. m. p. l.

